

# Cost Accounting Basics: There is No Magic Number

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*In fact, there is always some decision for which any cost is irrelevant regardless of the effort devoted to its calculation.*

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This article presents a less hysterical view of the cost accounting world by reviewing some of the basics of cost accounting — absorption cost, direct cost, and activity-based costs. Critics of cost accounting have been expressing their displeasure with cost systems for at least 70 years. But it is management that should define what kinds of information, and therefore what systems, are required. Our three idiosyncratic cost systems, Caterpillar, Northern Telecom, and Kal Kan, illustrate.

### **The Mechanics of Cost Accounting**

There is no one “correct” accounting system for product costing, but I will describe “typical” cost systems to provide a basis for understanding some of the issues raised by cost-accounting critics.

#### **Absorption Accounting**

The system that critics have been assailing for the last 40 years is the same system that critics bash today — absorption costing. In its most fundamental form, absorption product cost-

ing includes raw material, labor, and overhead. Overhead cost includes only overhead incurred in manufacturing. Fixed costs as well as variable costs go into the product cost. Accountants exclude selling and non-manufacturing administrative costs from product cost.

#### **EXAMPLE:**

*T.K., Inc. manufactures timers for washing machines, dishwashers, and similar products at its plant in Franklin, TN. Accountants take unit material cost from the bill of materials, and compute labor cost from product routings. However, because all overhead expense is charged to one category, accountants cannot easily identify this cost with a particular product. They estimate total overhead cost for the coming year as \$1,260,000 and estimated labor hours at 84,000.*

*Dividing the annual overhead by the labor hours ( $\$1,260,000/84,000$ ) provides an overhead rate of \$15 per labor hour. The product cost for the washing machine timer would then be:*

Material (from bill of materials)	\$55
Labor (one hour @ \$10)	10
Overhead (one hour x \$15 overhead rate)	15
Product cost	\$80

One confusing feature of absorption costing is over- or under-absorbed overhead. This value occurs because managers and accountants guess wrong at the start of the year when they estimate annual overhead cost and annual labor hours.

Let's assume that T.K., Inc. worked 6500 hours in January and that it incurred \$105,000 of actual overhead expense, but it "absorbs" only \$97,500 (6500 x \$15) of overhead. The difference of \$7500 appears on the income statement as an increase in the cost of goods sold.

In contrast, if T.K., Inc., used 7400 labor hours during January, the company would absorb \$111,000 (7400 x \$15), generating \$6000 of over-absorbed overhead and reducing cost of sales by \$6000! This creates confusion because it appears that a plant manager can produce income just by over-absorbing overhead! Unfortunately (or fortunately), companies still have to sell products to generate income in spite of what over-absorption appears to indicate.

If accountants waited until the end of each month and computed a monthly overhead rate for the actual hours worked and the actual overhead incurred, over- or under-absorbed overhead would disappear. It is the use of the *projected* annual overhead rate that causes the accounting system to produce over- or under-absorbed overhead. Of course, this number has no operating significance whatsoever — it is an accounting artifact of the absorption system.

Our example uses labor hours to allocate the overhead expense to the products. Although no historian knows for certain why companies began using labor hours as an overhead allocation base, the practice probably gained popularity because labor hours, collected to compute worker earnings, were extremely accurate; if not, the company heard about it on pay day. Thus a commonly available statistic

became the accepted method for allocating overhead expenses to individual products.

However, most systems contain far more complexity than this simple example. A company may use a different dollar overhead rate for each cost center, and it may base these rates on machine hours, units produced, or value of material instead of on labor hours.

In other words, a company may choose a variety of bases to assign overhead to production, and it may use different dollar rates for each cost center. Not only can it use a variety of overhead bases other than labor hours, the company can also break overhead into fixed and variable components for product costing so there is both a fixed overhead rate and a variable overhead rate.

#### **Accounting for Service Departments**

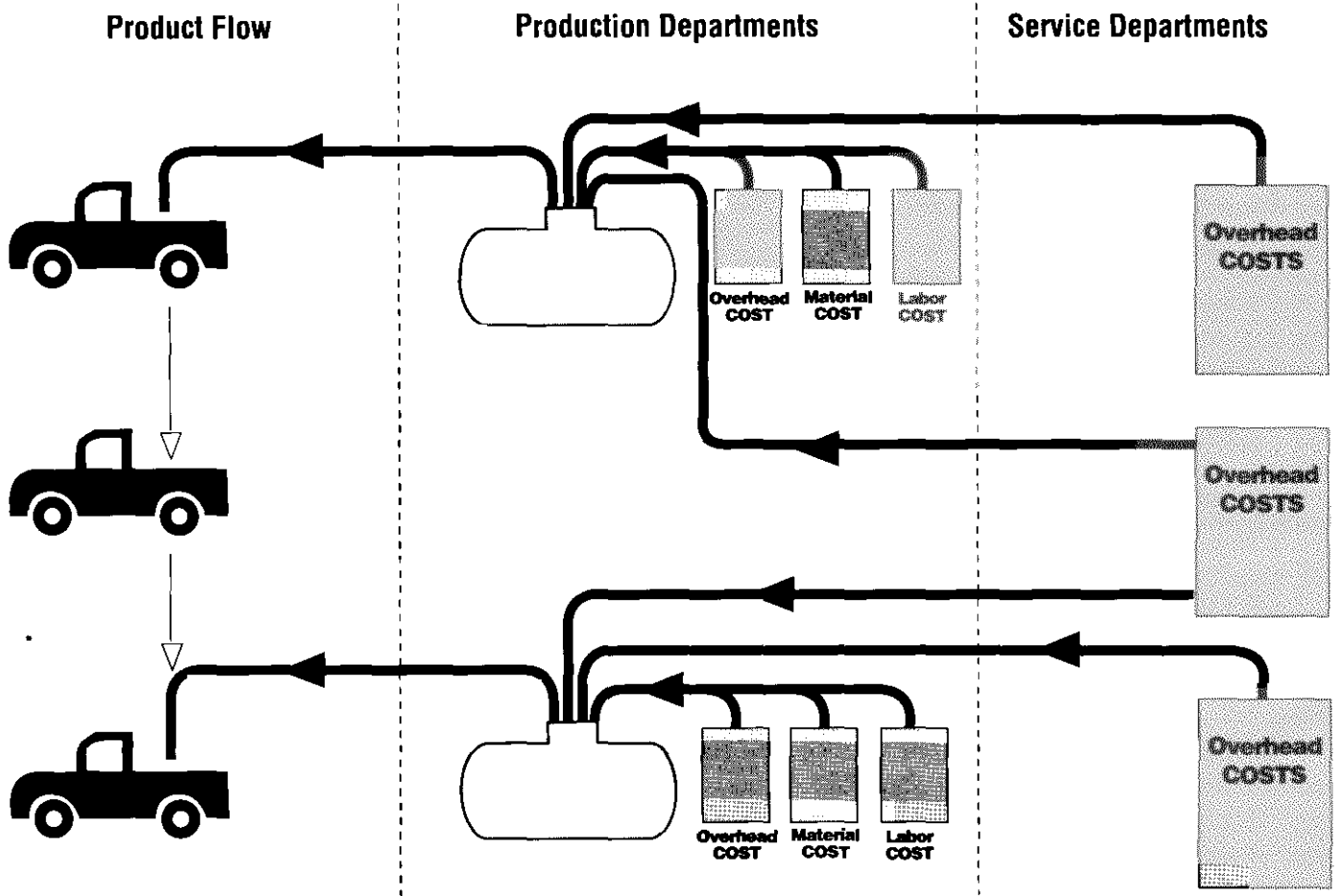
There is also the issue of how to transfer service department costs to individual cost centers. Figure 1 graphically depicts the movement of costs from service departments to cost centers to individual products.

Cost transfer from service departments like maintenance, power and heat, personnel, purchasing, and material control has bothered accountants for a long time. The 1944 edition of the Cost Accountants Handbook identifies many ways to assign service costs to the producing cost centers and departments:

Manufacturing organizations are not the only ones allocating service department costs

#### **Accounting for Service Departments**

<b>Expense</b>	<b>Assignment Method</b>
Repair Shop	Direct charge for service
Building Occupancy	Square feet used
Cafeteria	Daily count of employees
Employee Training	Number of employees trained each month by department
Employment Service	Number of employees
Engineering Maintenance	Machine hours
Time and Motion Studies	Hours spent in department
Production Control	Number of items
Purchasing Department	Number of purchase orders



**Figure 1.** Absorption costing uses labor hours to allocate overhead expense to production.

to products. In the late 1960s the Medicare Act focused on hospitals' assignment of costs to individual products. The law required hospitals to be reimbursed for the cost of Medicare patient care. Since most costs in hospitals are indirect to patient services, they devised very detailed indirect cost allocation schemes. They used meals to allocate cafeteria cost and square feet of floor space to allocate housekeeping costs. A variety of other activities were used to allocate to Medicare patients the remaining support costs.

**Direct Costing**

In the 1950s another approach to product costing emerged. Direct costing requires careful evaluation of production costs to determine which are fixed and which are variable with changes in activity. In contrast to the absorption cost approach, direct cost advocates argued that no fixed overhead should be allocated to products manufactured. They said that product costs should include only variable costs like

material, labor, and any variable overhead. All remaining fixed costs were charged to the period as an expense of doing business.

Direct costing also eliminated an absorption costing anomaly — absorption net income varies directly with inventory instead of with sales. Figure 3 illustrates net income calculations under both absorption and direct costing. Note that the three-year net income total is the same for both systems, but profits differ significantly from one year to the next.

The differences in annual net income occur because of the fixed overhead that absorption costing assigns to each unit produced. In this example fixed overhead per unit amounts to \$24, so each unit added to inventory takes \$24 of fixed cost off the income statement and places it in inventory, where it becomes an asset instead of an expense. An increase of 5000 units, as in year 2, takes \$120,000 of fixed overhead from the absorption income statement and puts it on the balance sheet in inven-

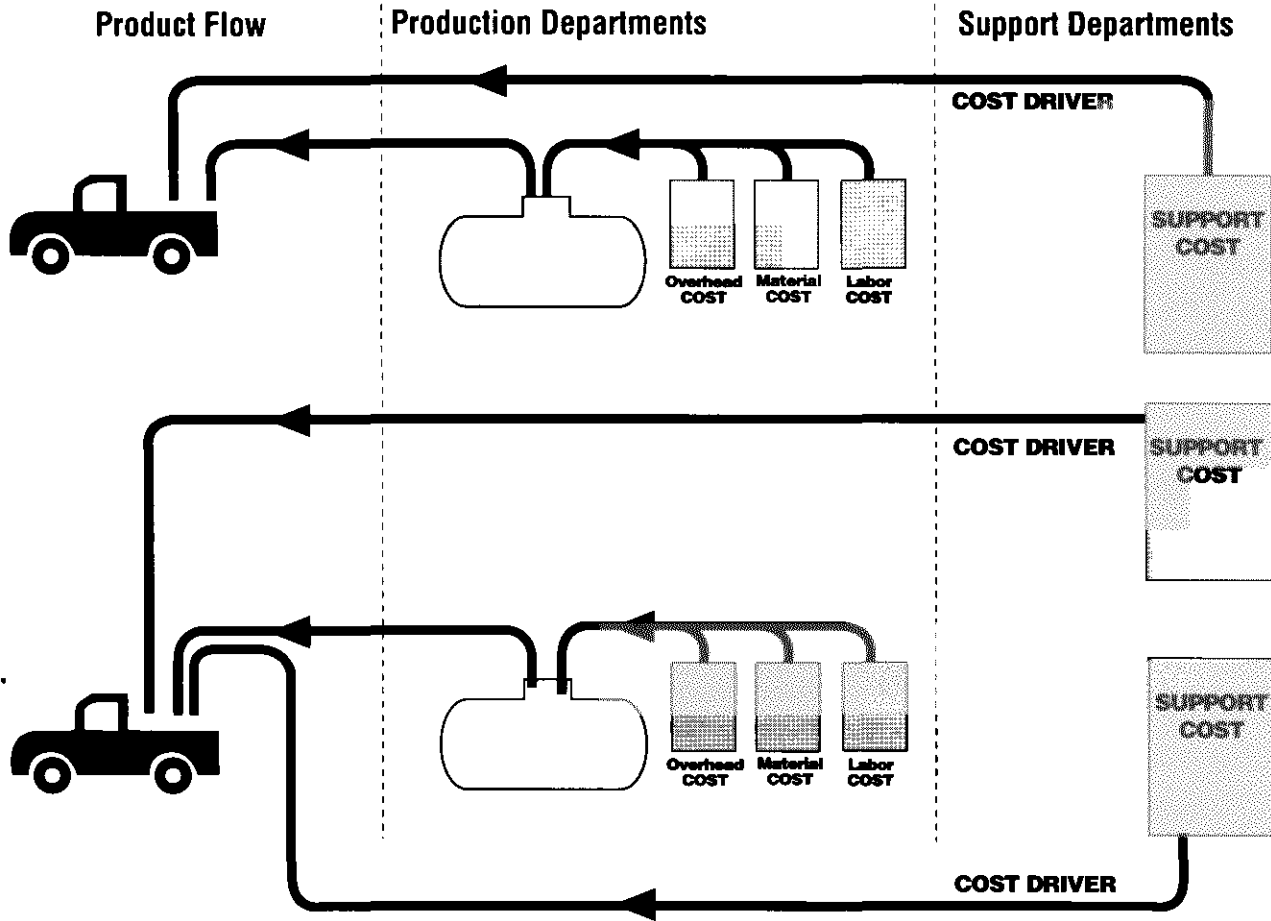


Figure 2. Activity-based costing assigns activities that influence a cost to a product, using drivers.

tory. Since the direct cost approach puts all fixed costs on the income statement regardless of the change in inventory, it has a net income \$120,000 smaller than the absorption cost statement. This costing method set off controversy that raged well into the 1970s, when it quietly faded.

**Contribution Accounting**

Some direct cost advocates went far beyond simple product costing; they devised accounting systems to trace all costs to activities or organization segments. They developed the contribution accounting concept that charges an individual decision maker, for example, with both the expenses he or she directly influences and with the revenues he or she directly generates. The net difference between the revenues generated by an individual and the costs directly controllable by that individual was called contribution. They applied the same philosophy to compute product contribution or product family contribution. In this

case, all costs that would disappear if the product disappeared were considered traceable to the product, and were deducted from the revenue generated by the product to derive product contribution.

Another activity direct cost advocates attempt to avoid is the splitting up of nondivisible costs. Direct costers consider the cost of maintaining a manufacturing plant a cost that cannot be divided up among the products produced in the plant; they consider it a cost common to all the products that will be incurred regardless of the types of product made in that plant.

Today direct cost advocates use material as product cost, and almost all other costs become period costs in their view. They have a simple view of product cost, and concentrate on tracing nondivisible costs (like equipment costs on a flow line) to the objects or groups of objects they support. The primary focus of direct-cost systems today is cost traceability, instead of product costs.

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*The sky is falling! The sky is falling! And it's all because of the accountants. American manufacturing is doomed by its out-dated accounting practices. Without drastic changes in procedures, we are all condemned to second class existence.*

*Chicken Little, 1991.*

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### **Activity-Based Costing**

Activity-based costing is a concept recently offered as a method for computing product costs. This method of product costing looks similar to absorption costing; however, the methods for assigning the costs to the products differ from those often associated with absorption costing. (See Figure 2, p. 17) In fact, advocates of this approach to product costing go to great pains to disassociate themselves from absorption costing systems that use labor as an allocation base.

### **Cost Drivers**

In a traditional absorption costing system accountants discuss alternative overhead allocation bases, but in activity-based costing systems accountants discuss cost drivers. *A cost driver is an activity that influences the level of a cost*, but an allocation base in an absorption cost system may or may not have a significant impact on a particular cost. The objective in an activity-based costing system is to first identify those activities that influence a cost and then to assign the cost to the product on the basis of the activity that drives the cost. Figure 2 graphically depicts the cost flow from supporting activities to products through cost drivers.

For example, engineering change orders drive up engineering cost, so a portion of engineering cost may be assigned to a product on the basis of the number of engineering change orders that product generates. The change order is the cost driver used to apportion engineering cost to the product.

Activity-based costing advocates also argue that because all costs are variable in the long run, they should be treated as variable costs. They consider all costs divisible, and attempt to push all costs down to the product. They might, for example, assign purchasing costs to products on the basis of the number of purchase orders issued for each product. They might assign material management costs to products on

the basis of the number of material tickets issued. Accounting costs might be assigned to products on the basis of the amount of time accountants spend working on transactions related to each product. *The activity-based system involves a great deal of data collection on cost drivers.*

Because an activity-based costing system assumes all costs are variable, the system produces net income numbers that differ from direct cost net income the same way that absorption cost net income differs from direct cost net income. But reconciliation of the direct cost net income to the activity-based cost net income is much more complex because of the detailed approach to cost allocation used in activity-based costing.

### **An Historical Perspective**

Cost accounting has been accused of being out of touch with new developments in manufacturing, with impeding the use of modern manufacturing tools, and with being irrelevant to current operating conditions. Direct labor is cited as an example of an expense that has dramatically dropped in the modern manufacturing environment. Data taken from the U.S. Department of Commerce *Census of Manufacturers* show that labor as a percentage of sales has declined steadily over approximately the past 40 years, but there have been no dramatic shifts. In fact, for the past 40 years labor has been relatively insignificant compared to material.

It is difficult to support the idea that modern manufacturing is experiencing a significant drop in labor costs' share of total manufacturing costs. What *is* new is that managers and accountants have finally noticed what is obvious to anyone who wanted to look at the facts.

*"It Seems to Me I've Heard That Song Before..."*

Another seemingly new phenomenon is the criticism of accounting pouring from various periodicals. But such criticism is not new. Look at what was being said 70 years ago:

*Hence the most hopeful feature of the cost-accounting situation today lies in the completeness of the failure of the cost accountant to meet the needs of the industrial world.... No real progress will be made till*

## Direct Versus Absorption Costing

Assumptions:

Unit selling price	\$50
Unit variable cost	\$10
Annual fixed manufacturing cost	\$240,000
Other annual fixed cost	\$60,000
Normal annual production	10,000 units
Fixed overhead rate (\$240,000 / 10,000)	\$24

Year 1: Produce and sell 10,000 units

	<b>Absorption Costing</b>	<b>Direct Costing</b>
Sales	\$500,000	\$500,000
Cost of sales	340,000	100,000
Gross profit	\$160,000	\$400,000
Fixed costs	60,000	300,000
Profit	\$100,000	\$100,000

Year 2: Produce 10,000 units and sell 5000 units

	<b>Absorption Costing</b>	<b>Direct Costing</b>
Sales	\$250,000	\$250,000
Cost of sales	170,000	50,000
Gross profit	\$80,000	\$200,000
Fixed costs	60,000	300,000
Profit	\$20,000	(\$100,000)

Year 3: Produce 10,000 units and sell 15,000 units

	<b>Absorption Costing</b>	<b>Direct Costing</b>
Sales	\$750,000	\$750,000
Cost of sales	510,000	150,000
Gross profit	\$240,000	\$600,000
Fixed costs	60,000	300,000
Profit	\$180,000	\$300,000

### Reconciliation of Yearly Net Income

Year 1: Produce and sell 10,000 units

Since the units produced and the units sold are the same, both methods of costing show the same net income.

Year 2: Produce 10,000 units and sell 5000 units

Adding 5000 units to inventory removes \$120,000 from the absorption costing income statement and puts it on the balance sheet in inventory. This makes the absorption income statement \$120,000 more profitable than the direct cost income statement. Thus, the difference in net incomes for the two methods amounts to \$24 x 5000, or \$120,000.

Absorption net income	\$ 20,000
Direct cost net income	(100,000)
Difference in net incomes	\$ 120,000

Year 3: Produce 10,000 units and sell 15,000 units

Because the company sells more units than it produces, the absorption costing income statement has the \$24 per unit of fixed overhead added to its cost of sales resulting in a net income \$120,000 lower than that for the direct cost income statement.

Absorption net income	\$180,000
Direct cost net income	300,000
Difference in net incomes	\$ 120,000

**Figure 3.**

*the accounting profession awakens to the fact that, like Rip Van Winkle, it has been asleep for twenty years.*

G. Charter Harrison, *NACA Bulletin* in 1921.

Cooper argues in his 1989 *Harvard Business Review* paper on cost accounting that when the cost system is inadequate managers create their own cost systems. Harrison in 1921 argued the same thing and described two such cases in his paper.

The direct costing controversy begun in the 1950s is full of criticism of cost accounting practices. Several hundred articles on direct costing include almost every criticism and issue raised in the recent accounting wars. Here an author complains that the system excludes information managers needed for decision making.

*As an operating tool, the conventional profit and loss statement has other defects which could be eliminated under a direct costing system....if the operating executive wants to know his break-even point or how profits would be affected by different levels of sales, he must look to some supplementary schedule other than the conventional profit and loss statement.*

Waldo W. Newkirk, "How Direct Costing Can Work for Management," *NACA Bulletin*, 1951

Another author blames much of managements' problems on the inadequacy of the cost system.

*"...what about the use of this kind of information for the other purposes of accounting? What about pricing policy based on a product cost compiled with so many "if's" and "and's"? Is it not possible that many of our economic ills are a result of such a policy?"*

H. W. Luenstroth, "The Case for Direct Costing," *NACA Bulletin*, 1952

Another author in exasperation tries to get accountants to recognize that by striving for the absolutely correct cost they are chasing the wrong objective.

*Look fellows, we've got ourselves so all-fired involved trying to get costs down to a gnat's tooth that we've lost sight of our objective.*

*There is no such thing as an absolutely true cost. Our cost statements at the best are rough estimates. Why knock ourselves out distributing and redistributing fixed overhead through the accounts when the ultimate answer is at best a rational estimate?*

J. H. Rushton, "Cost Accounting Gets Its Hair Cut," *NACA Bulletin*, 1954

Perhaps the real issue is not whether cost-accounting systems are adequate, but why accountants feel compelled to periodically criticize cost accounting systems. We may be concerned about the wrong phenomena.

### **Costs for Decision Making**

Whether or not there is something wrong with cost accounting, managers should question whether they get the appropriate information for decision making. Managers deserve much of the blame if they do not receive appropriate cost information for decision-making because the appropriate cost for a particular decision is a function of the decision.

No cost exists in the absolute; all costs are relative to some objective. Without knowledge of an objective no accountant can prepare the appropriate cost for a manager.

### **Different Costs for Different Purposes**

In 1923 J. Maurice Clark said in his "Studies in the Economics of Overhead Costs" that managers require different costs for different purposes. This means a product cost appropriate for one purpose may be completely inappropriate for another purpose.

#### **Case 1**

What is the product cost for an empty seat on an airplane about to leave Nashville for Chicago? If a customer offers to pay \$20 for a place on the plane and this allows the airline to sell a seat that would otherwise have been empty, should the airline accept the offer?

The added passenger will probably consume one bag of peanuts and a soft drink, so the added cost to the airline is probably 50 cents for food and drink and some slight increase in fuel cost, say, \$3. In this case the relevant cost for the product is \$3.50. If the airline accepts the offer of \$20, it will be \$16.50 better off.

However, the product cost of \$3.50 is completely inappropriate for deciding whether to offer flights from Nashville to Chicago. Company managers must consider the capital required for the flights, the personnel, and any increases in support services caused by adding the flight. So \$3.50 is a suitable cost for deciding whether to take the additional passenger, but it is the wrong product cost for deciding whether to offer flights from Nashville to Chicago.

### **Case 2**

General, Inc., receives an offer from an offshore vendor to produce a part that General now makes in its plant at a cost of \$45; the vendor offers to make the part for \$35. Is this a good offer? Is the product cost of \$45 the right product cost to use for this decision? No! Regardless of how the product cost was computed, it is inappropriate for the make-or-buy decision. *Product cost is not the relevant cost for make-or-buy decisions.*

Managers must consider a whole set of issues and many different kinds of costs in a make-or-buy decision.

They must consider whether existing equipment will be sold if the product is purchased; they must consider whether they will have to add personnel to handle the receipt of the material; they must look at the impact on total facilities cost of this decision; and, they must look at strategic issues to see if buying outside is best for the company in the long run.

A simple comparison of the product cost and the offered price will not give the correct answer. There is no magic number. No product cost, regardless of how it is computed, is correct for make or buy decisions — managers must do a cash flow analysis that includes all cash flows affected by the decision to buy outside, and they must include cash flows for the life of the contract. But even this does not cover all the issues because managers must think of the strategic impact.

### **Searching for the Perfect Number**

But, one may ask, will we not have a cost that answers all our questions if we compute the true product cost? Perhaps. A true cost as

defined by economists is a cost that includes all the opportunity costs of making the product. Opportunity cost depends on the opportunities foregone to make a product, and since opportunities constantly change, the true product cost will also constantly change. True product cost is dynamic.

Well, one might argue, if not true costs then give me accurate costs. Accurate costs, just like true costs are not constant. A cost is accurate only in relation to a particular application; computational techniques alone do not make a cost accurate.

For example, a direct product cost (variable cost only) provides an accurate estimate of cost changes for short run fluctuations in output, but it does not provide an accurate estimate of total cost eliminated when a plant is shut down. Activity-based costs provide a more accurate estimate of product cost for financial reporting than a labor hour based product cost, but they do not provide accurate estimates of the cost eliminated if a product is dropped.

In fact, there is always some decision for which any cost is irrelevant regardless of the effort devoted to its calculation. Cost accuracy is a function of the correspondence between calculation procedure and the purpose for which the cost will be used.

### **Strategy-Driven Cost Systems**

If relevant costs depend on the decision a manager faces, then what do absorption costs, direct costs, and activity-based costs have to do with managing a business? They provide alternative approaches to collecting and disseminating cost information throughout the organization. Any of these systems can work if it provides managers with the relevant cost building blocks.

One company might find that a direct-cost system works best for its operations; another that activity-based costing works best; and, still a third will find that absorption costing works fine. The system that gives managers the greatest flexibility in assembling costs for a variety of decisions works best.

It is not just the numbers generated as a



## Three Idiosyncratic Cost Systems —

### Northern Telecom, Caterpillar, and Kal Kan

These three companies have developed cost systems to fit their organizations. They avoid labeling their systems — they just want the systems to work.

#### **NORTHERN TELECOM**

Northern Telecom manufactures telephone switches and related telecommunications equipment. Its products have characteristics completely different from Caterpillar's. Its approach to accounting differs also. The uniqueness of its approach to costing is best summarized by reviewing its profit and loss statement, the company's "New P&L."

Product cost is relatively unimportant for Northern Telecom because the products have such a short life and because manufacturing labor is relatively insignificant in producing the products. Consequently, the line on the income statement labeled product cost includes only the direct material cost of the products sold and the engineering costs of supporting product installation at customer sites. What a manufacturing company typically calls direct labor is included in the Manufacturing Costs category.

Each expense category on the income statement includes only costs traceable to that category; no cost allocations blur the distinctions among the categories. Thus, the new product introduction costs include all costs related to new product introductions, and these costs do not include any general overhead — they are strictly related to new product development. Additional elements of the income statement are explained in the second part of the exhibit.

Notice the category called balance sheet adjustment. This line on the statement reconciles the internal net income to the net income reported to outsiders, the figure calculated according to the Financial Accounting Standards Board's financial reporting rules. This line allows managers to see the internal income number and the amount by which it differs from the one reported to outside parties. It covers all adjustments made to reported inventory cost and brings internal inventory cost in conformance with the financial reporting rules.

#### **CATERPILLAR**

Caterpillar's cost system serves three separate requirements:

- **Standard costs** — inventory valuation in financial reports to outsiders.
- **Process controls** — used for tracking and managing operating costs and other key operating characteristics.
- **Product costing** — used for a variety of cost analysis purposes.

The standard cost system uses broad averaging methods adequate for financial reporting that spread overhead evenly over all products. But managers need more detailed averages for components, parts, activities and cost elements, so Caterpillar developed a completely separate cost system for them. The standard cost system serves financial reporting needs, and the detailed system serves management needs — different costs for different purposes.

#### **Product costing**

This cost system resembles an activity-based cost system because a variety of activity measures assign cost to each product. However, it also differs from an activity-based cost system because it recognizes both fixed

and variable costs and uses replacement costs for equipment depreciation instead of historical cost

Each work area, machine tool, manufacturing cell, and assembly area has a cost rate for assigning costs to individual products as they move through each area. The cost rate is based on the upcoming six-month business plan that includes both budgeted costs and projected production volume. In other words, the product cost is based on projections; it is not a cost accumulation system for computing "actual" cost.

Although the product cost includes direct material, production labor, and overhead, it excludes research and engineering costs, parts distribution costs, and selling general and administrative costs. Abnormal costs such as startup costs, costs of rearranging facilities, and costs of unoccupied buildings are also excluded from product cost. Managers control them outside the product cost system.

The company assigns production costs to three activity groupings: logistics, manufacturing, and general overhead. Procuring, transporting, receiving, and handling the steel in Caterpillar's product is expensive. Logistics costs are broken down into period costs and variable costs, and part weight is the primary measure used to assign these costs to products.

In manufacturing, each cost center develops three cost rates for costing products: a variable rate for variable labor related overhead expenses, a machine variable rate for machine related variable expenses, and a period machine rate. The company computes the depreciation component of the cost rate using the replacement cost of equipment instead of its historical cost. The accountants argue that since the company will eventually replace the equipment, the replacement cost is the appropriate cost to use.

To cost an individual part, accountants apply the variable and period cost rates to the product for the cost centers through which it moves. Then they add the logistics costs using the weight of the part, and finally they add the material cost to arrive at the total cost.

Caterpillar's cost system also contains a methodology to estimate costs for products currently under development and a predictive cost system to give design and process engineers estimates of production costs for alternative designs and processes

#### **KAL KAN**

Kal Kan makes pet foods. Their cost system is distinctively simple: product cost includes only raw material and packaging cost. No overhead, no labor, just material. The cost system focuses attention on the management of total costs rather than unit costs.

Note the statement's wording. The line where "Cost of Goods Sold" usually appears is called "Raw Material and Packaging," and the costs of operation are "Costs of Turning Investment Into Prime Margin." These terms are very descriptive, unambiguous, and they convey very clear concepts to the manager reading the statement. Also, since product cost includes only raw materials and packaging, managers are unlikely to assume the product cost numbers provide "true" costs for decision making.

Product line statements in this system include only costs traceable to each product line, that is, the system allocates no nontraceable costs to any product. Costs such as advertising that are traceable to a product appear as part of the operating expenses for that product.

## Northern Telecom Income Statement

For the Year Ended December 31, 1990

Revenue		\$1,277,300
Product Costs	628,600	
Product Margin		648,700
Manufacturing Costs		21,300
Inventory Shrink, Warranty Expense, Etc.		61,800
New Product Introduction		208,200
Selling and Marketing		136,800
Total Costs		428,100
Direct Margin		220,600
Administrative Cost		79,900
Other Operating (Income)/Expense		(1,500)
Total		78,400
Operating Profit		142,200
Corporate Assessments		52,100
Other Non-Operating (Income)/Expense		27,700
Total		79,800
Earnings before Balance Sheet Adjustment		62,400
Balance Sheet Adjustment		(22)
Earnings Before Taxes		\$ 62,378

Note: Numbers developed for illustration purposes only.

### Description of Income Statement Elements Northern Telecom "New P&L"

**Revenue** — Revenue from hardware sales, leases, maintenance contracts, engineering, and software sales

**Product Cost** — Materials, installation expense, and customer engineering

**Product Margin** — The difference between revenue and product cost

**Manufacturing Costs** — Facilities expense, labor cost, materials management, quality, and other production costs

**New Product Introduction** — Research and development, retrofit costs, customer service, and manufacturing product engineering

**Selling and Marketing** — Sales force support, marketing expense, advertising, and marketing administration

**Direct Margin** — Product margin minus the above costs

**Administrative Cost** — Finance department, human resource management, systems management, and executive offices

**Other Operating (Income)/Expense** — Other items

**Operating Profit** — Direct margin minus administrative and other

**Corporate Assessments** — Charges for using corporate services

**Other Non-Operating (Income)/Expense** — Other nonoperating items

**Earnings before Balance Sheet Adjustment** — Operating profit minus above items

**Balance Sheet Adjustment** — Overhead allocations to inventory, and any other adjustment needed to bring internal income in line with GAAP reporting

Figure 4.

## Kal Kan Products Income Statement

For the Year Ended December 31, 1990

Sales	\$1,150,000
Raw Material and Packaging	540,000
Prime Margin	610,000
Operating Expenses	
Wages and Salaries	90,000
Facilities Expense	270,000
Other Operating Costs	85,000
Costs of Turning Investment into	445,000
Prime Margin	
Profit Before Taxes	\$165,000

Note: Numbers developed for illustration purposes only.

Figure 5.

final product cost that makes a system work or not work, it is the way managers and accountants use the data provided by the system that determines the value of a cost system. There is no right or wrong cost system, only systems that work or do not work in a given organization. Company strategy, management style, and company culture all impact the value of a cost system.

These variables also affect the kind of cost system a company creates. One should not be surprised to find numerous variations on cost systems in different companies because each one has created a system that helps it solve the unique problems its managers face. A good cost system helps managers accomplish their strategic objectives, and any one of the systems described at the start of this paper can do this. Stop looking for the correct cost system, and start looking for a system that works in your company.

Managers must define a clear company strategy, translate it into operational goals for all parts of the company, and develop a cost system to support these goals and strategy. Without this system-strategy linkage, the cost system will always be inadequate.

No cost system, regardless of its quality, can overcome a weak management process. Good management processes overcome weaknesses in accounting systems, but good accounting systems can never compensate for bad management.

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