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Professor Robert S. Kaplan wrote this updated version of "Destin Brass Products Co.," HBS No. 190-089, prepared by Professor William J. Bruns, Jr. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Edited to fit class time.

Wilkerson Company

"The decline in our profits has become intolerable. The severe price cutting in pumps has dropped our pre-tax margin to less than 3%, far below our historical 10% margins. Fortunately, our competitors are overlooking the opportunities for profit in flow controllers. Our recent 10% price increase in that line has been implemented without losing any business."

Rebecca Parker, president of the Wilkerson Company, was discussing operating results in the latest month with Peggy Knight, the controller, and John Scott, the manufacturing manager. The meeting among the three was taking place in an atmosphere tinged with apprehension because competitors had been reducing prices on pumps, Wilkerson's major product line. Since pumps were a commodity product, Parker had seen no alternative but to match the reduced prices to maintain volume. But the price cuts had led to declining company profits, especially in the pump line (summary operating results for the previous month, March 2010, are shown in Exhibits 1 and 2).

Wilkerson supplied products to manufacturers of water purification equipment. The company had started with a unique design for valves that it could produce to tolerances that were better than any in the industry. Parker quickly established a loyal customer base because of the high quality of its manufactured valves. Parker and Scott realized that Wilkerson's existing labor skills and machining equipment could also be used to produce pumps and flow controllers, products that were also purchased by its customers. They soon established a major presence in the high-volume pump product line and the more customized flow controller line.

Wilkerson's production process started with the purchase of semi-finished components from several suppliers. It machined these parts to the required tolerances and assembled them in the company's modern manufacturing facility. The same equipment and labor were used for all three product lines, and production runs were scheduled to match customer shipping requirements. Suppliers and customers had agreed to just-in-time deliveries, and products were packed and shipped as completed.

Valves were produced by assembling four different machined components. Scott had designed machines that held components in fixtures so that they could be machined automatically. The valves were standard products and could be produced and shipped in large lots. Although Scott felt several competitors could now match Parker's quality in valves, none had tried to gain market share by cutting price, and gross margins had been maintained at a standard 35%.

The manufacturing process for pumps was practically identical to that for valves. Five components were machined and then assembled into the final product. The pumps were shipped to industrial product distributors after assembly. Recently, it seemed as if each month brought new reports of reduced prices for pumps. Wilkerson had matched the lower prices so that it would not give up its place as a major pump supplier. Gross margins on pump sales in the latest month had fallen below 20%, well below the company's planned gross margin of 35%.

Flow controllers were devices that controlled the rate and direction of flow of chemicals. They required more components and more labor, than pumps or valves, for each finished unit. Also, there was much more variety in the types of flow controllers used in industry, so many more production runs and shipments were performed for this product line than for valves. Wilkerson had recently raised flow controller prices by more than 10% with no apparent effect on demand.

Wilkerson had always used a simple cost accounting system. Each unit of product was charged for direct material and labor cost. Material cost was based on the prices paid for components under annual purchasing agreements. Labor rates, including fringe benefits, were $25 per hour, and were charged to products based on the standard run times for each product (see Exhibit 3). The company had only one producing department, in which components were both machined and assembled into finished products. The overhead costs in this department were allocated to products as a percentage of production-run direct labor cost. Currently, the rate was 300%. Since direct labor cost had to be recorded anyway to prepare factory payroll, this was an inexpensive way to allocate overhead costs to products.

Knight noted that some companies didn't allocate any overhead costs to products, treating them as period, not product, expenses. For these companies, product profitability was measured at the contribution margin level, price less all variable costs. Wilkerson's variable costs were only its direct material and direct labor costs. On that basis, all products, including pumps, would be generating substantial contribution to overhead and profits. She thought that perhaps some of Wilkerson's competitors were following this procedure and pricing to cover variable costs.

Knight had recently led a small task force to study Wilkerson's overhead costs since they had now become much larger than the direct labor expenses. The study had revealed the following information:

1. Workers often operated several of the machines simultaneously once they were set up. For other operations, however, workers could operate only one machine. Thus machine-related expenses might relate more to the machine hours of a product than to its production-run labor hours.

2. A set-up had to be performed each time a batch of components had to be machined in a production run. Each component in a product required a separate production run to machine the raw materials or purchased part to the specifications for the product.

3. People in the receiving and production control departments ordered, processed, inspected, and moved each batch of components for a production run. This work required about the same amount of time whether the components were for a long or a short production run, or whether the components were expensive or inexpensive.

4. The work in the packaging and shipping area had increased during the past couple of years as Wilkerson increased the number of customers it served. Each time products were packaged and shipped, about the same amount of work was required, regardless of the number of items in the shipment.

Knight's team had collected the data shown in Exhibit 4 based on operations in March 2010. The team felt that this month was typical of ongoing operations. Some people recalled, however, that when demand was really heavy last year, the machines had worked 12,000 hours in a month and the factory handled up to 180 production runs and 400 shipments without experiencing any production delays or use of overtime.

Exhibit 1 - Wilkerson Company: Operating Results (March 2010)

Sales		$2,152,500	100%
Direct Labor Expense		271,250	
Direct Materials Expense		458,000	
Manufacturing overhead			
Machine-related expenses	$336,000		
Setup labor	40,000		
Receiving and production control	180,000		
Engineering	100,000		
Packaging and shipping	150,000		
Total Manufacturing Overhead		806,000	
Gross Margin		$617,250	29%
General, Selling & Admin. Expense		559,650	
Operating Income (pre-tax)		$57,600	3%

Exhibit 2 - Product Profitability Analysis (March 2010)

	Valves	Pumps	Flow Controllers
Direct labor cost	$10.00	$12.50	$10.00
Direct material cost	16.00	20.00	22.00
Manufacturing overhead (300%)	30.00	37.50	30.00
Standard unit costs	$56.00	$70.00	$62.00
Target selling price	$86.15	$107.69	$95.38
Planned gross margin (%)	35%	35%	35%
Actual selling price	$86.00	$87.00	$105.00
Actual gross margin (%)	34.9%	19.5%	41.0%

Exhibit 3 - Product Data

Product Lines	Valves	Pumps	Flow Controllers
Materials per unit	4 components 2 @ $2 = $4 2 @ $6 = $12	5 components 3 @ $2 = $6 2 @ $7 = $14	10 components 4 @ $1 = $4 5 @ $2 = $10 1 @ $8 = $8
Material cost per unit	$16	$20	$14
Direct Labor per unit	0.4 DL hours	0.5 DL hours	0.4 DL hours
Direct Labor $/unit @ $25/DL hr. (including employee benefits)	$10	$12.50	$10.00
Machine hours per unit	0.5	0.5	0.3

Exhibit 4 - Monthly Production and Operating Statistics (March 2010)

	Valves	Pumps	Flow Controllers	Total
Production (units)	7,500	12,500	4,000	24,000
Machine hours	3,750	6,250	1,200	11,200
Production runs	10	50	100	160
Number of shipments	10	70	220	300
Hours of engineering work	250	375	625	1,250

What Does Knee Surgery Really Cost? Few know, and that's a problem for health spending.
By Melanie Evans | Photographs by Tim Gruber for The Wall Street Journal
The Wall Street Journal - Aug. 21, 2018 11:29 a.m. ET

For nearly a decade, Gundersen Health System's hospital in La Crosse, Wis., boosted the price of knee-replacement surgery an average of 3% a year. By 2016, the average list price was more than $50,000, including the surgeon and anesthesiologist. Yet even as administrators raised the price, they had no real idea what it cost to perform the surgery—the most common for hospitals in the U.S. outside of those related to childbirth. They set a price using a combination of educated guesswork and a canny assessment of market opportunity.

Prompted by rumblings from Medicare and private insurers over potential changes to payments, Gundersen decided to nail down the numbers. During an 18-month review, an efficiency expert trailed doctors and nurses to record every minute of activity and note instruments, resources and medicines used. The hospital tallied the time nurses spent wheeling around VCR carts, a mismatch of available postsurgery beds, unnecessarily costly bone cement and delays dispatching physical therapists to get patients moving. The actual cost? $10,550 at most, including the physicians. The list price was five times that amount.

Surgeon Mark Topolski spoke to Walter Spolum before his knee was replaced in June, and marked his left leg.

Competitive forces are out of whack in health care. Hospitals are often ignorant about their actual costs. Instead, they often increase prices to meet profit targets. Patients, especially those with insurance, often don’t know the price of a procedure and rarely shop around.

This dynamic is a driving force in the explosion in health-care spending in the U.S., which will soon reach close to 20% of GDP. Americans spend more per capita on health care than any other developed nation, even though they aren’t buying more health care overall. The rise in hospital prices has outpaced economywide inflation for decades. “When price isn’t tightly linked to cost, that is a sign that the market isn’t competitive,” said Harvard economist Leemore Dafny.

Mr. Spolum’s knee surgery. During the hospital’s 18-month project, an efficiency expert trailed doctors and nurses to track labor and supplies used to establish a precise cost.

Hospitals can be shielded from the competition that forces other industries to wring out expenses and slash prices. Hospital list prices are a starting point for negotiations with insurance companies over what they will actually pay, and those deals are confidential. Consolidation has given hospitals greater pricing power in many markets, according to health-economics researchers. “Being cost effective was not an imperative in that type of market dynamic,” said Derek Haas, chief executive officer of Avant-garde Health, a health-care cost and quality analytics company that worked with Gundersen.

On knee-replacement surgery, higher-cost hospitals spent almost twice the amount lower-cost hospitals spent, despite largely similar quality and roughly comparable patients, research by Mr. Haas and Harvard Business School Professor Robert Kaplan showed. “It’s a standard procedure” that doesn’t vary much from one hospital to another, and nor should its costs, Mr. Kaplan said. “Carve out the old knee and put in a new joint.”

The study found the hospital had been using an expensive cement premixed with antibiotics and could switch to a less-expensive variety. Above, a technician prepares the cement during Mr. Spolum’s surgery.

For consumers, the prices paid for the surgery at some hospitals in the U.S. were more than double the prices at others, according to an analysis of 88 million privately insured people to be published in the Quarterly Journal of Economics.

Before 2016, Gundersen Lutheran Medical Center, one of the Gundersen system's six hospitals, lacked even an estimated cost for knee-replacement surgery, which it performs an average of more than 400 times a year. The hospital long set its price, with help from consultants, to be on par with other hospitals, and to sustain the orthopedic department's margin. Cost approximations, such as those used by Medicare to value a physician's time, are a starting point for many hospitals.

The project to nail down a cost was initiated in 2013 by Lisa Wied, who then oversaw Gundersen's orthopedic department. She had stumbled across an initiative on the internet by the Institute for Healthcare Improvement, a Boston-based health-quality nonprofit, to dig into hospital joint-replacement costs. "It hit home," said Ms. Wied, who previously worked in manufacturing, an industry that more scrupulously tracks its costs.

Ms. Wied dispatched a nurse and an efficiency expert with stopwatches to trail patients into exam rooms and surgical suites. They mingled with technicians, doctors and physical therapists, measuring time spent and supplies used. Labor is the single-largest expense for hospitals, and the minute-by-minute accounting gave the hospital a precise look.

On average, a certified nurse assistant needed 10 minutes to collect personal items such as glasses or dentures from patients before surgery. A technician took another 20 minutes to insert an IV into patients awaiting the operation. Time spent in Gundersen's operating room—the most expensive minutes of a patient's hospital visit—averaged 95 to 105 minutes.

Gundersen Lutheran Medical Center, in La Crosse, Wis.

The biggest revelations came after patients left surgery. Kendra Reynolds, Gundersen's inpatient orthopedic director, and nurse Beth Krage saw an early map of results, dotted with storm clouds to indicate where the analysis identified potential problems. "It looked like a thunderstorm," said Ms. Krage, a clinical nurse leader for Gundersen.

On busy days, the hospital had no available beds for knee-replacement patients after surgery. Patients with nowhere to go remained in temporary postsurgical units for as long as 24 hours, prolonging their recovery. The backlog created confusion among physical therapists, who waited to start recovery until patients transferred to the hospital's orthopedic unit. Meantime, doctors didn't always order physical therapy to begin quickly even when patients were rapidly transferred to the orthopedic unit. Research shows patients who start moving soon after surgery, often the same day as an operation, have shorter hospital stays, less pain and more strength and mobility than patients who wait.

Different surgeons varied on other procedures, too, for reasons that weren't always clear. One consistently inserted a drain in patients to prevent hematomas, or blood that pools under the skin. Other surgeons did not. The drain added to costs, required time to remove and increased risk of infection.

Nurses spent significant time preparing patients to go home, wheeling televisions and VCRs to patients' bedsides to play educational videos, before coaching patients one-on-one on what to expect next. It was time-consuming and could be done more effectively in a group class at a clinic before surgery. "We didn't know it was a problem until it was down on paper," Ms. Krage said. Staff who grappled with the demands of daily operations had no prior opportunity to address those issues, Ms. Reynolds said. "We were just trying to keep our head above water."

Armed with the new information, Gundersen was able to pinpoint waste, and it set out to cut inefficiencies and lower costs. Changes to the process mean the knee surgery now costs the hospital an average $8,700 at most to perform, an 18% savings.

The new process was on display one day this June. Gundersen orthopedic surgeon Mark Topolski and his team prepared for a knee replacement on patient Walter Spolum, a 75-year-old retired railroad blacksmith from Tomah, Wis.

Mr. Spolum's arms and healthy knee had been gently fastened to the operating table with protective padding, with help from perioperative technician Billy Ortiz. Before the cost investigation, the surgical team was responsible for positioning the patient for surgery, but Gundersen's analysis showed that distracted and slowed them as they readied the operating room. Bringing in Mr. Ortiz helped reduce time in the OR by 5 to 10 minutes, lowering the cost.

Dr. Topolski swiftly moves through each step of the procedure, which he performs routinely with the same staff. After a neat incision, he works with a surgical assistant and nurse practitioner to clear damaged tissue from the patient's knee, shaving away bone where they will attach the new one.

To secure the artificial joint to the bone, Dr. Topolski calls for a technician to prepare a strong adhesive known as bone cement. On a nearby table, a technician churns the mixture by hand, then assembles what resembles a caulk gun loaded with cement, which she hands to the surgeon.

Gundersen's analysis found that the hospital had been exclusively using brand-name cement, premixed with antibiotics. The hospital slashed its cement costs by 57% by switching to a generic, which research shows can be used in most cases with the same results. Staff can hand-mix antibiotics into generic cement when needed. It isn't clear how the orthopedics department came to use the brand-name cement, said hospital staff. Dr. Topolski, in an interview before the surgery, said he was perplexed when the analysis uncovered it. "When you're in the OR, you just want your cement when you want your cement," he said. He used generic as a military surgeon with "no problem," he said. "Why are we paying so much?"

After the surgery, surgical nurse Emily McGrath visited Mr. Spolum on the orthopedic unit. Gundersen created Ms. McGrath's job to prevent the treatment delays uncovered during the review. She steps in "wherever I'm needed," she said.

She tested Mr. Spolum's mobility, urged him to eat and coached him on using a device to measure lung strength. That same day, a physical therapist appeared to help him take his first post-surgery walk. Mr. Spolum, who had tossed hay bales at his hobby farm with his grandchildren the week before surgery, returned home the next day. His stay at the hospital was a full day shorter than his last visit to Gundersen in August 2016, when the same surgeon replaced his other knee, said Sherrie Spolum, his wife. "That was just fine with him, he wanted to get home," she said.

Since the knee-surgery investigation, Gundersen has scrutinized the cost of its laboratory services, which other hospitals use under contract. Gundersen squeezed those costs and lowered prices, holding on to business against encroaching national laboratory chains, said Ms. Wied, who is now a vice president of operations for Gundersen Health System.

The more Gundersen wrings from its costs, the more potential profit it earns. Because Gundersen and the majority of U.S. hospitals are charitable corporations, profits don't go to shareholders. Income instead gets poured into new equipment, construction or acquisitions, and is used to subsidize medical care that loses money.

After the surgery, nurse Emily McGrath tested Mr. Spolum's mobility. The hospital created her job after the study to step in where needed to prevent treatment delays.

An employer group in Madison, Wis., presented Gundersen with another option: Cut the prices it charges patients. As Gundersen was concluding its cost evaluations, the group known as the Alliance approached it with an ultimatum. Hospitals elsewhere in Wisconsin with good quality results had cut knee-replacement prices by more than 20% on average to win their business, the employer group said. Gundersen could do the same, or risk losing patients.

The Alliance entered La Crosse only the year before, but its foothold was growing. The employer group represents 5,600 people in La Crosse and 88,000 people across three states. "They had a number they were focused on," said Susan Rochholz, director of managed care for the Gundersen Health System. "We had to figure out if we could live with that."

Hospital executives believed similar demands from other payers would follow. A bid for the Alliance's business would be a test run. Executives weighed a price cut by considering the new savings from improved efficiency, and factoring in overhead costs, including human resources, maintenance and utilities, while keeping an eye on profit margins.

Ultimately, Gundersen lowered its price for the Alliance employers. The hospital declined to disclose the negotiated price, but said it still makes money on the procedures it does for Alliance members. The Alliance also declined to disclose details. Gundersen's list price for the knee surgery, not including the surgeon and anesthesiologist, in 2017 dropped 7%, which it attributed to shorter hospital stays. "I don't think we would say we were wildly overcharging," said Dr. Scott Rathgaber, chief executive officer of Gundersen Health System, of the previous price paid by patients. "We were inefficient. We didn't know it."

At Wieser Brothers, a general contractor nearby in La Crescent, Minn., that is part of the Alliance, the agreement with Gundersen will reduce the price of knee surgery for its employees. It expects the discount to be greater than 30% off the list price. Executives at the company, which has nearly 200 people enrolled in its health-insurance plan, described the price cut as welcome but puzzling.

Co-founder Jeff Wieser said the company tracks its own costs in minute detail—down to the expense for fire extinguishers, toilet accessories and temporary telephones it would need to compete for jobs such as a recent one to remodel a Minnesota high school. Wieser uses software to track labor; solicits competing bids from subcontractors; and itemizes supplies. "There's no reason they can't run a business like we do," said Mr. Wieser.

From: WSJ.com [access@interactive.wsj.com]
Sent: Wednesday, May 15, 2019 1:39 PM
To: Brian Lendecky
Subject: WSJ NEWS ALERT: White House Pushes for More Transparency on Health Care Prices

THE WALL STREET JOURNAL – News Alert

White House Pushes for More Transparency on Health-Care Prices
The Trump administration has been working behind the scenes for months on a strategy to force greater price disclosure across much of the $3.5 trillion health-care industry.

You Need a New Cost System When…

By Robin Cooper
Harvard Business Review

By now it's well publicized—if not obvious—that many companies' cost accounting systems are falling down on the job. They give managers incorrect product costing information, or they inundate managers with irrelevant cost information, or they fail to measure the things that really count. Strategies may be conceptually brilliant, but if they are based on faulty information about the cost of a product, they are likely to fail in the marketplace. Many have.

But redesigning a cost system is expensive and time consuming. Do you really have to do it? There are two ways of finding out.

An obsolete cost system sends many signals, so one way to discover if you need a new system is to learn how to read those signals. (See box below for a definition of an obsolete cost system.)

Cost systems don't become obsolete overnight. They gradually outlive their usefulness as they fail to adapt to change. So, a second way to tell if your system has deteriorated is to analyze the changes that have occurred in your organization and in its environment since you first implemented the system.

<u>What Is an Obsolete Cost System?</u>

A cost system shouldn't necessarily measure absolutely everything down to the finest degree. Taking infinitesimal measurements of each bit of material and each second of direct labor can be expensive and time consuming. The expense is necessary only when the consequences of relying on inaccurate information are severe. When, for instance, margins are paper thin and the market moves quickly, basing decisions on inaccurate cost data can put a company out of business in a hurry. In other situations, highly accurate numbers are less important, and the company shouldn't spend a lot of money to get them.

A good cost system trades off the cost of measurement and the cost of errors from inaccurate information in a way that minimizes total cost (see accompanying graphs). As an economist would put it, the optimal system exists at the point where the marginal cost of improving the system's accuracy exactly equals the marginal benefit.

The optimal cost system minimizes total costs and changes when information technology improves or when errors become more costly. An optimal cost system is a moving target. Competitive conditions are dynamic, so the cost of errors changes. Similarly, as information-processing technology changes, so does the cost of measurement.

It is important to remember that product diversity has a great deal to do with accuracy. As diversity increases—as high volume is mixed with low volume, or labor intensity is mixed with automation—costs are more likely to be skewed. To achieve the same level of accuracy, companies will have to spend more on measurements than when products were more homogeneous. If they don't, their cost systems will be obsolete.

It's Time to Redesign Your System If You Notice That…

…functional managers want to drop seemingly profitable lines. Production managers know when a product is troublesome. And marketing managers know when a product isn't priced competitively. You can use their knowledge to test your cost system. Ask them to list the ten established products they would most like to drop. If there is nothing special about those items, and yet they still show high profits, the cost system may be failing to capture their true complexity.

…profit margins are hard to explain. Managers should be able to give simple explanations of profit margins: "We have the best production technologies"; "We have lower production volumes"; "Nobody else makes that product"; or "We set the standard and make a premium for doing so." In one company, the production manager was under constant pressure to make a certain new product more cheaply. He couldn't explain the high costs. He was confident that he was doing a good job and believed the product should be competitive. Years later a revised cost system showed that because the product used more direct labor than any other, it was being charged too much overhead. It was in fact the company's most profitable line. Unfortunately, by then, competitors had introduced similar products and the opportunity was lost.

…hard-to-make products show big profits. A good test of a cost system is an item that's harder to make or requires more inspection or rework than others. Such products will have higher than average costs and, unless they are priced at a premium, will have low margins. If they are not premium priced but appear to be highly profitable, the cost system is failing to report their true cost.

…departments have their own cost systems. When functional managers have completely lost faith in the official cost system, they may develop systems of their own. The design engineers in an electronics company didn't trust the numbers the cost system produced. Bad or complex designs came out looking like big profit makers, while products the engineers knew to be well designed appeared to be losers. The engineering department responded by developing its own system for costing products. Where the official system used direct labor to allocate costs, the private system used a number of different bases. Also, the engineers tracked costs they considered to be product related but that the official system treated as period expenses. The department ignored the official system and used its private system to steer design work.

…the accounting department spends a lot of time on special projects. Some decisions require more accurate information than others. A decision on out-sourcing a high-volume product, for example, is important enough to warrant more detailed and accurate cost data. Accounting departments often set up special teams to study such situations. But the cost system—if it's doing its job—should provide managers with much of the information they need. If its failure to do so makes lengthy special studies routine, the cost system is probably obsolete. This was the case at one company, where half of the accounting staff was working on special projects, some of which took more than six months to complete.

…you have a high-margin niche all to yourself. Unless barriers to entry exist, companies should expect competition. If there is none, the cost system may be reporting fictitious margins. One company found that as its niche expanded, overall margins fell. A redesigned cost system showed that products the company thought were earning high profits were actually losing money. Another company discovered that a competitor was buying its products and then repackaging and selling them. The company's selling price, based on faulty cost information, was lower than the competitor's production cost.

…competitors' prices are unrealistically low. When other successful companies, especially smaller ones, charge less for items you produce in high volume, your cost system is suspect. It is likely the system averages product costs among your high- and low-volume items. The smaller company probably makes products whose production volumes are similar, so averaging creates less cost distortion.

…customers don't mind price increases. Customers will certainly never ask for price increases. But if they aren't surprised when increases come, they may know more about your costs than you. Even if they complain, they may think, "It's about time" and pay the higher prices willingly. After all, they may have explored making the product themselves or have information on competitors' costs. When one company sensed that its prices were too low, it raised them by 25%. The market didn't flinch. Customers paid the higher prices without complaint; sales volume dropped off only slightly. The market confirmed management's intuition that the cost information was wrong.

…the results of bids are hard to explain. Unless the market is chaotic, managers should be able to estimate the competitiveness of their bids. In particular, they should be able to set high bids for business they don't really want and low bids for business that's important to them. But a company's bids are often based on the cost information it gets internally. If that information is faulty, the company will have no idea how its bid compares with competitors'. When one cutting-tool manufacturer kept winning high bids and losing low bids, the president suspected that the cost system was the culprit. A new cost system solved the problem.

…vendor bids are lower than expected. Companies that are considering outsourcing can compare vendors' bids with their own costs to tell if their cost system is working well. If the bid price varies widely from the cost of making the product, the cost system may be at fault. In one case, the vendor bid was below the variable cost of the product, yet there were no indications that the vendor was that much more efficient. A special team looked into the matter and found that the product could in fact be made more cheaply in-house—despite the cost system's message to the contrary.

…reported costs change because of new financial accounting regulations. Systems designed with one goal in mind generally don't do a good job of meeting others.[1] A system that aims to meet financial reporting requirements probably distorts costs. If a new GAAP regulation changes your costs even when materials prices and manufacturing costs are constant, chances are you tailored your system to meet financial reporting requirements—not to provide accurate cost information.

Your System May be Obsolete If You've Experienced…

…increased automation. When direct labor is used as an allocation base, the introduction of automated production processes can cause the system to fail. The new machinery uses less direct labor but usually requires more support for programming and engineering. Products made through automation tend not to be charged enough overhead, while products manufactured conventionally are charged too much.

One company had completely revamped its production process to move from machines that required continuous direct-labor supervision to machines that required virtually no operator attendance. The

[1] See Robert S. Kaplan, "One Cost System Isn't Enough," p. 61.

direct-labor-based system failed to capture the economics of the new production process because it didn't allocate overhead to products made on the new machines. A system based on machine hours corrected the problem. Reported costs of some products changed by as much as 30%.

A manufacturer introduced a new line of products, which was a good strategic fit but did not fit well with the cost system. Production of the new product was highly automated, so when it came time to allocate overhead, as always, on the basis of direct labor hours, the new product got off easy. The system didn't reflect the new line's more intensive use of the costly automated machines. The cost system was distorted. Even worse, the existing products were charged with too much overhead and appeared unprofitable. Subsequently, the company moved their production offshore.

…changes in the use of support functions. If a new product requires different kinds of support from existing lines—more detailed inspection, for example, or longer setups—the amount of overhead allocated to it will likely be incorrect. These distortions can creep in slowly. For example, one company introduced a new line of plastic products to complement its sheet metal business. Initially, volume was relatively low, so little distortion arose from allocating the overhead needed only for metal fabrication to both plastic and metal products. Over time, however, sales of the plastic products increased dramatically, and the distortion became serious.

…changes in product market strategy. The decision to market in a low-volume niche means smaller production volume. In contrast, the decision to move from experimental parts to production parts means higher volume. Most cost systems are designed with one type of production in mind and don't differentiate well between the overhead consumed by high- and low-volume products. When production volumes vary widely in the same company, cost distortion arises. If production volumes are fairly similar—say, volume of one product is no more than five times that of any other—product costs will probably be accurate. Accuracy falls off rapidly as the range grows to more than 10 to 1.[2]

One company produced some products in batches of under 50 and others in batches of more than 1,000. Its traditional direct-labor-based cost system grossly under-costed the low-volume products and made them appear more profitable than they were. The company thought its product strategy—trying to be everything to everybody—was working, but the economics were misleading. Year after year, profits fell, and the company was eventually taken over.

In contrast, another company was forced to adopt the strategy of producing low-volume, customized products because competitors had an overwhelming labor cost advantage. To ensure that the orders it accepted for low-volume items were truly profitable, the company introduced a new cost system that more appropriately traced overhead to high- and low-volume products. The new cost system helped the company implement its new strategy successfully.

…simplification of manufacturing processes. Changes in the production environment don't necessarily require more complex cost systems. Simpler production philosophies, such as just-in-time (JIT) or cellular manufacturing, can make a needlessly complex system obsolete. In one company, the cost system measured the value of work in process at every inventory stage, requiring hundreds of thousands of measurements a year. But the introduction of JIT reduced inventory levels so much that those measurements were no longer important.

[2] See Robin Cooper and Robert S. Kaplan, "Measure Costs Right: Make the Right Decisions," p. 96.

Cellular manufacturing has the same effect on old cost systems. This manufacturing approach creates a series of mini-factories, each specializing in similar items. Companies should be able to trace overhead directly to the mini-factories and then spread those costs evenly over all the units they produce. A cost system that traces costs to individual products is probably obsolete.

…intensified competition. When competition heats up, so does the chance that a competitor will take advantage of a poor pricing decision. The increased risk associated with poor cost information can make a system obsolete. When a product is over-costed, its profit margin will look deceptively unattractive. If a competitor gives chase to the product, the company may mistakenly decide not to defend its position. Alternatively, prices set too high because they're over-costed might attract competitors that would otherwise have faced a higher barrier to entry. One company redesigned its cost system and discovered that a particular product line was considerably more profitable than it had thought. To avoid attracting competition, the company increased the discount, added more field support, and increased advertising spending.

When companies earn a reasonable overall margin, they often don't worry about the margins individual products make. In the face of stiffer competition, though, management needs reliable cost information to act confidently. Executives must know how much leeway they have in underpricing the competition and at what point a product line is not worth saving.

One manufacturing company introduced a new system just in the nick of time. Its old system had been generating huge year-end variances, so the president astutely targeted the cost system for redesign. Soon after, the industry went into a slump and prices fell dramatically. The company, with its new knowledge of product costs, was able to cut prices more aggressively than other players. It picked up the business of several failed competitors and in certain product lines increased its market share permanently by as much as 300%.

…unbundling of products. For many years one company had bundled two products together: apparel fastener machines, which the customer rented, and apparel fasteners, which the customer attached to their products using the machines. The rental fee for the machines was purposely set low to attract customers, who became captive buyers of the fasteners. The price of the fasteners was set high enough to cover their costs as well as the unrecovered costs of the machines. The cost system traced all overhead costs to fasteners and none to the machines.

On the surface, the system worked fine. Customers were happy and loyal. But when the company redesigned the cost system so it separated costs of the two types of products, it became clear that the cost system was actually sending highly distorted signals. Because some of the fasteners were labor intensive, the old system had attributed a disproportionate amount of overhead (including the cost of the attaching machines) to them. Over the years, the company had put little effort into these product lines and consequently walked away from attractive markets.

…deregulation. Under regulation, a company doesn't set the prices; the regulators do. Companies make profits by controlling overall efficiency. Deregulation increases a company's competitive choices but can make a cost system useless. When companies have new freedom to "cherry pick" products, accurate knowledge of costs is invaluable. One railroad company, for example, when faced with deregulation, introduced a new cost system that for the first time in the company's history reported the cost of a freight-car move from city to city. Its existing cost system reported the cost of each function

(switching, locomotive repair, and the like) but not the cost of a move. Knowledge of these costs allowed the railroad to compete more effectively with other railroads and trucking companies.

Some situations mimic the effects of deregulation, like when a captive supplier is allowed or forced to compete on the outside. An internal transfer pricing system, for instance, acts much like a regulated pricing system. One company that recently began to compete in the open market discovered that because of a faulty cost system, its pricing attracted the business it was least interested in and turned away the business it really wanted. The company secured sales of low-volume, complex products instead of the high-volume, simple products for which its production facility was designed. A new cost system corrected the problem and allowed the company to bid more aggressively on high-volume business.

…technological improvements. Systems can become obsolete if they fail to take advantage of technical improvements that permit more efficient data gathering and analysis. The introduction of an automated production floor scheduling system, for example, captures considerably more information about the products. This information can go into the cost system at virtually no cost.

Similarly, centrally-controlled equipment increases the availability of machine-readable information. Setup time and run times can be measured directly at no extra cost. AI or remote sensing technology can also provide lots of new information at little additional cost.

…changes in strategy and behavioral goals. Sometimes management changes its strategy and therefore wants to encourage and reward different behavior. The cost system doesn't always adapt. One company was successful because of its technological innovation. When the market sent signals that cost—not just technical superiority—was important, the company decided to pay more attention to efficient designs. It urged its engineers to stop designing from the ground up and to incorporate some of the parts already in use. The old cost system couldn't track such things as how many part numbers were used, so there was no way to identify expensive products made with low-volume or unique components. The company designed its new system with this important new variable in mind.

Another company's strategy moved toward products with very short life cycles. Designing products that could be manufactured economically in small batches became critical. In particular, the company needed to compare the cost of inserting different types of components both manually and automatically. A new cost system enabled it to do that.

Another company bought an expensive piece of test equipment to improve product quality. But the old cost system treated the machine as overhead. The work force took advantage of this "free" work center by building complex products on it. A new cost system ensured that workers put the new equipment to best use by making the test area a cost center and charging products an hourly rate for using it.

Is It Time?

The mere presence of symptoms doesn't mean the cost system is obsolete. A product may have inexplicably low profit margins because the cost system is obsolete—or because a competitor has adopted a penetration strategy. It helps to think about the internal and external changes that make a cost system obsolete. They provide more clues to whether your system needs fixing. Checking for symptoms and looking for changes that may have caused them gives a good indication of the effectiveness of your current system. If you find no symptoms, the system is doing fine. If you observe several symptoms and know what probably caused them, it's time for a redesign.

The hard part is when you detect only one or two symptoms. Then the call is more difficult to make. One way to proceed is to set up a pilot cost system for a single product line and compare the numbers with those the existing system produces. If the results differ widely, a redesign is in order.

Remember that because conditions keep changing, managers should evaluate their systems every few years. They don't necessarily have to design a new system that often. Before a company plunges into redesign it should be sure to analyze the investment. The potential savings—the difference between the total costs of the existing system and the total costs of a new one—should exceed the cost of developing and implementing the new one.

A cost system, with modifications along the way, should last about a decade. But at some point, you can no longer patch up and add on to the system. Companies may not want to face up to the fact that their cost systems need to be redesigned, but if they don't, they may face far more severe consequences. A business that doesn't know what its products really cost won't be in business for long.

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Games Managers Play at Budget Time

By Richard Steele and Craig Albright
MIT Sloan Management Review

One of the most thoroughly studied questions in business is how, at budgeting time, large corporations should choose among investment opportunities. In-house economists, management advisors and even Nobel laureates have worked on this problem and come up with an impressive array of quantitative and process-oriented resource allocation systems. Why, then, are so many senior executives frustrated with the process and convinced that their companies' capital is not being invested as well as it could be?

One reason is that even the best-designed systems can be trumped by the power of personality. A forceful appeal sometimes carries more weight than even the most objectively accurate financial analysis built on highly reliable facts. It is now commonplace, in fact, for talented and charismatic managers to spin, manipulate and otherwise cajole senior management into funding their business ideas — often in the face of numbers that would, on their own, dictate a negative decision. Put another way, when people are economical with the truth during capital budgeting, the underlying economics get lost.

Having guided dozens of major corporations through the budgeting process and watched hundreds of presentations by line managers asking for capital, we have profiled five archetypes of bad behavior commonly used by managers to subvert decision-making standards and win resources. It is not uncommon for a manager to adopt more than one type, depending on how his or her plan is faring relative to others in the planning and budgeting process. Fortunately, there are ways for senior management teams to counteract such behavior directly during budgeting discussions and, over time, to instill values that lead to better use of investment capital.

THE SANDBAGGER

"There is no way that we, or anyone else, can grow by 10%."

Managers are sandbagging when they routinely come to the table with a business plan that is less ambitious than one they know they could probably fulfill. Sandbaggers argue that the market is so tough, the best the company could hope for is slight incremental improvement even with additional resources or the most heroic leadership. Of course, when such managers exceed their targets, as they usually do, they appear to be heroes themselves.

The president of a successful $700 million North American brokerage business, for example, was reluctant to commit to an earnings-growth target that the company's CEO had proposed. While the president thought the business had the potential to achieve the CEO's target, he did not want to risk missing the target and lose his group's bonuses. Instead of turning to his team for ideas on how to reach the goals, however, he dug his heels in and insisted that the business really could not meet them; he eventually negotiated a lower target. At the end of the year, the brokerage division announced earnings growth that was just above the reduced target.

Later, during the president's performance review, the CEO pointed to the repeated sandbagging and the time spent debating performance targets in the planning process as a serious problem. It was preventing the CEO and his team from spending time where they needed to most — with their employees and customers.

Sandbagging costs more than time, however: It also creates energy-sapping internal debate and, worse still, leads to people being overpaid for their performance as bonuses kick in even when low budget targets are met.

THE MAGICIAN

"There really are no weak spots in our business right now."

Sometimes division managers know things about their business that do not show up in the budget figures. They may have heard that a large customer was intending to defect, that a key manager was on her way out, or that market share numbers were starting to slip. But at budget time, magicians cover up faults in the business by conveniently leaving out uncomfortable facts and diverting attention to more positive aspects of the operation.

For instance, the manager of a European beverage company was taken aback when her colleagues noted several weaknesses in her plan for the core business. In response, she diverted their attention to a speculative new idea to launch store-branded products for discount retailers. A true magician, she alternately pointed to growth rates and customer surveys in that channel to support her claims that the new plan would significantly boost the company's top line. After several months of debate, the top management team remained hopelessly deadlocked and frustrated at their inability to come to an agreement on the proposed new line of business. Meanwhile, the core business's performance was declining.

There should be no magic to the budget process, but some managers try to cast a spell rather than answer legitimate challenges to their proposals. If they are not brought back to reality, the inconvenient details they've forgotten to mention will reappear and expose what may turn out to have been disastrous decisions.

THE LONE AGENT

"Yes, but that principle does not apply to our business."

Some managers contend that their business cannot conform to corporate-budgeting conventions because of its supposedly unique character. In comparison with competitors, they say, it may be much bigger or much smaller, more international or more domestic, more high-tech or more low-tech. Driven by their fear of being managed to the norm, lone agents stonewall during meetings ("Yes, but …") and expect special treatment. They demand different standards for goals and performance that undermine trust and teamwork and make performance management across a company's businesses difficult.

The group executive of a Latin American wholesale bank, a unit of a financial services company, lost his temper when he was asked by the executive committee to cut operating costs by 5% as part of a groupwide exercise to identify funds that could be reinvested in new businesses. Believing the target to be at odds with the right strategy for the bank — its location in a developing market made it different from other units, he contended — the executive would not agree to the request. Rather than open his thinking to alternatives, he lashed out at those who had proposed the cost targets and any other executive who appeared to support them. Other top executives, in turn, saw the executive's behavior as divisive and an attempt to gain unfair privilege.

By claiming to merit special consideration, lone agents sow mistrust among their peers and superiors and, in the process, damage the top team's ability to debate the key strategic issues it faces in a mature and disciplined way.

THE VISIONARY
"I can't say exactly when, but this is going to be big — really big."

Managers who don't have the numbers on their side often appeal to emotions. Visionaries harp repeatedly on the "breakthrough" technology or service that will "revolutionize" the industry and remain on the "cutting edge" for years to come. The core of the argument often goes like this: "Given the enormous upside, which at this point cannot be quantified because it is 5 to 10 years out, it will be worth putting up with poor short-term performance."

For example, an ambitious director of business development for an insurance company proposed a plan that would allow consumers to buy term life insurance directly from the company, rather than through agents. His boss told the director that while the vision was compelling, he was troubled by the deep investment required throughout the planning horizon in order to set up the technology, change processes, educate consumers and so on. The fact was, the director had very little to say about near- or medium-term performance and tried to meet objections by going back to the long-term opportunity his vision represented. The end result in this case was a stalemate among the top executives, although visionaries often do win the resources they need — at least for a year or two, until top management and stockholders, frustrated by the lack of results, raise questions that lead to the plan's termination.

Companies need visionaries, to be sure. But visionaries should be standing on solid factual ground when they look to the future, not floating in the clouds. The challenge, then, is to find a way to marry the vision with a genuine commitment to delivering short-term performance.

THE HOSTAGE TAKER
"If we don't invest big right now, we'll be left on the sidelines."

Sometimes managers claim that they can deliver significant and immediate performance improvements if they are given a huge proportion of the available corporate capital. Hostage takers act as if the decision-making obstacle is not the management team but the chief executive, who in their view should be prepared to bet the company on their brilliant plan.

The managing director for a U.K. company wanted to turn his business into a full-service one-stop-shopping service provider — a radical proposal that would require a huge investment in a risky market and direct resources away from other profitable lines of business. Although the chief executive respected the managing director's strategic and financial acumen, she was not convinced that the plan reflected the best use of the company's capital. Rather than force a broader discussion of options and alternatives, however, she allowed her attention to be captured by the hostage taker's ultimatum.

Consequently, the company invested hundreds of millions of pounds behind his growth plan and continued to do so for each of the next three years, even as the markets proved much more difficult than initially forecast. Other growth options were starved of investment during this time, leaving the company overexposed to a single high-risk opportunity.

Like lone agents, hostage takers want special treatment and, like visionaries, they appeal to emotions. But because of the percentage of corporate investment that they seek, they have the potential to do the most damage to the company's future if their plans do not turn out as projected.

WHY DO MANAGERS PLAY GAMES?

It is one thing to be able to identify the games managers play and quite another to be able to do something about them. Each of the five archetypes reflects organizational or individual shortcomings — be it a lack of critical thinking, a misalignment in ambition and purpose, a breakdown in corporate culture or poor incentives.

First, managerial game playing sometimes reflects a lack of skills and know-how rather than Machiavellian intentions. For example, managers may be weak strategic thinkers, have poor planning skills, or be inexperienced in valuing investment opportunities correctly. In such situations, the remedy would include training, coaching and other forms of management education.

Second, bad behavior can be a matter of deeper flaws. Some managers know full well what they are doing and are simply not team players; others lack a proper focus on short-term performance. These deficiencies require a firmer hand.

Third, managerial stratagems at budget time can also reflect a lack of clarity about performance goals and expectations. It is not always easy to get the executive team and business-unit management to agree on specific performance targets. More often than not, misunderstandings arise over the pace at which goals are to be met: Executive teams usually have a much shorter time frame in mind when it comes to most performance targets. The end result is that business-unit managers feel they have to tap dance their way through uncomfortable meetings. While this gap may never be fully closed, its existence should be acknowledged by top management in order to minimize inefficient behavior.

Finally, managerial antics may be a response to the environment — the corporate culture, incentives and values that shape the workplace. For example, if the company tends to promote hard-charging, sales-oriented types into senior management positions, the company may produce a surplus of lone agents and hostage takers. If the company's general managers came up through the finance function, there may be a tendency to produce sandbaggers and magicians — people who know how to manipulate financial data to their own advantage. In either case, senior management will have to use all the tools at its disposal —mission statements, compensation, promotions and training —to develop a more cooperative, forward-looking and results-oriented system within the company.

CHANGING THE RULES

Even in the most perfectly designed organization, managers are going to play the system, and executives need to be ready to deal with disruptive behavior when it arises. While this is clearly a long-term, complex issue, there are actions that senior management can take in the short term to reduce the tax that bad behaviors can levy on a company's capital. It's important to take action quickly, however, because managers who are successful game players will continue their behavior until it is checked — a sandbagger who gets his bonus one year will come up with new reasons for being unable to meet corporate targets the next time around.

1. Get It on the Table.
Openly acknowledge at the beginning of each budgeting meeting — in a lighthearted way — the human tendency to twist the facts to one's favor. That will help diffuse tension and make it clear that the criteria for investment approval will be not only the hard numbers that make up the proposal but also the overall integrity with which the numbers are presented. Even if a business plan comes in with the highest internal rate of return of all the proposals, for example, it may not receive funding if the investment committee sees games being played that undermine the credibility of the analysis.

2. Paint a Picture of the Ideal.
Create a profile of the behaviors and values that managers ought to reflect when presenting budgets for approval. Examples might include the ability to meet short- and long-term expectations, the ability to be candid about the condition of the business, the ability to make and reach stretch targets and so on. The development of such skills can be made a part of corporate training programs. At one company 150 top managers learned about the behaviors and capabilities necessary for success at the company by participating in simulated dialogues focused on resource allocation. To put some bite into the program, even the CEO took part, role playing both good and bad behaviors and making it clear that failure to meet the required standards could cost a manager his or her seat at the top table.

3. Deal Positively With Disruptive Behavior.
Be willing and ready to respond to disruptive game playing during budget meetings. For each type of manipulation, there is both an inflammatory and a productive way to respond. (See "Neutralizing Disruptive Behaviors.") For example, when lone agents are demanding that a different set of rules be applied to their budgets, reemphasize the company's well-publicized decision-making standards. And when managers are sandbagging, point to the existence of top-down goals, known to the sandbaggers well ahead of time.

4. Put Peer Pressure to Work.
Require that all business-unit and general managers be present for key business reviews — and that they participate in the question-and-answer phase. General managers from other businesses may have firsthand knowledge that will lead them to raise questions that executives may not have thought of. For example, a general manager who has seen business-unit magicians perform before may be able to redirect the meeting's attention away from the dazzle of a new market and ask whether the company really has the organization in place to compete within it.

Executives with their hands on the till need to keep one eye on the numbers and the other on the psychology of their managers — and be ready to respond in real time to disruptive behavior. Taking the veil off of bad behaviors, however, does more than just make budgeting discussions more productive. It also lays the foundation for addressing two larger and longer-term challenges. By taking the time to define which competencies and behaviors are required to make the capital-budgeting process more effective and efficient, senior executives create organizational discipline and a concrete way of establishing the highly sought-after performance-oriented culture. And by linking behaviors and values to strategy and capital-allocation decisions, senior executives tap into a proven way of delivering better performance. In the end, everyone wins when the means and the ends of delivering performance are aligned.

Neutralizing Disruptive Behaviors

For a variety of organizational and personal reasons, many managers will come to budgeting discussions with less than optimal proposals. But their discussions of these proposals can be disruptive, with repercussions for both employee and company performance. Top management needs to rein in such behavior, but angry criticisms are not the way to go about that task. Instead, top executives should neutralize the behavior with unemotional responses.

Disruptive Behavior	**Inflammatory Response**	**Neutralizing Action**
Sandbagger	Criticize the manager's lack of ambition	Refer to and enforce top-down corporate goals
Magician	Berate the manager for failing to reconcile conflicting data	Refocus the manger's attention on trends in the core business
Lone Agent	Accuse the manager of failing to be a team player	Reinforce group standards as the price of a seat at the table
Visionary	Belabor the missing details in the manager's plan	Require the manager to demonstrate how and when the vision will be economically attractive
Hostage Taker	Claim that capital constraints rule out the proposal	Require the manager to develop several credible alternatives and to make trade-offs transparent

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Congress should be required to vote yearly on an 'all-inclusive' budget

BY MICHAEL H. GRANOF, OPINION CONTRIBUTOR — 04/06/21 04:30 PM
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

The Treasury Department has issued its annual Financial Report of the United States Government for the past fiscal year. In contrast to the annual financial reports of state and local governments, it is remarkably forthright, explicitly asserting in text and charts why the federal government will not be fiscally sustainable over the next 75 years. Yet it is missing one financial statement that is required of state and local governments: a comparison of actual to budgeted revenues and expenses.

Although a mandate to provide such a statement may appear to be nothing more than a technical accounting enhancement, it could, in fact, be a key means of imposing federal fiscal discipline — holding Congress and the president accountable for the outcomes of their policy decisions.

The reason for such an omission may be surprising to all but aficionados of the federal budgetary and accounting systems. But it is nevertheless straightforward. Congress does not pass, and the president does not sign, an actual budget as the term is commonly used — that is, one that sets forth estimated revenues and expenses.

In federal parlance, "budget" is used in multiple ways. Most prominently it refers to the proposals that the president submits to Congress and what is entitled "Budget of the United States Government." Comprehensive and exceedingly detailed, it sets forth projected and proposed revenues and expenses for the coming year. Nevertheless, it is little more than the president's fiscal wish list and typically is dead on arrival at the Capitol.

Notably too, the Treasury Department issues monthly reports of actual federal receipts and disbursements. It terms these receipts "budgeted receipts and disbursements" and when summed for the entire year, the difference between the receipts and disbursements is referred to as the "budget surplus" or "deficit." Whereas in conventional usage budgeted receipts and disbursements are those expected to be collected or paid in the future, as used in Treasury reports they are those actually collected or made in the past.

Rather than pass a “real” budget, Congress initially adopts a budget resolution that is intended to provide guidance to its various committees. A non-binding agreement — which, unlike a law, does not go to the president for signature — it sets forth in the broadest terms what the federal government expects to take in as revenues and the maximum amounts that its committees should appropriate for spending. Following the adoption of this resolution and consideration of spending bills recommended by various House and Senate committees, Congress enacts several (currently twelve) appropriation measures.

The failure to adopt an all-inclusive budget means that, in any given year, Congress controls only a small portion of total revenues and expenses. Most conspicuously, Congress does not explicitly vote on either revenues or expenses that are dictated by previously enacted, ongoing laws that remain in effect until changed. On the revenue side of the ledger, almost all federal tax collections fall into this category. Similarly, on the expenditure side approximately two-thirds of outlays are not covered by annual appropriations. These are mainly entitlement programs such as Social Security, Medicare, Medicaid, SNAP and military and civilian employee retirement benefits. Also on autopilot is the ever-increasing interest on the federal debt.

Worse, owing to the opportunity to make “supplemental” mid-year appropriations, Congress may opt not to initially appropriate funds for costs almost certain to be incurred in the coming year. Thus, by some estimates, 70% of the Iraq and Afghanistan wars between 2003 and 2008 was funded by supplemental or “emergency” appropriations.

The consequence of not having to adopt a budget that includes all revenues and expenses and will allow for actual-to-budget comparisons is that Congress is not held accountable for deficits (or surpluses) that differ markedly from what was promised. For example, regardless of whether intentionally or not, legislators can misestimate the impact of new entitlements or changes in tax provisions. A budget, accompanied by an end-of-year actual-to-budget comparison would, at the very least, spotlight — and demand explanations of — differences between what Congress promises and what it delivers.

A budget is important for another reason as well. Federal fiscal policy has a major impact on the U.S. economy. Those disbursements and receipts that are not included in the current year appropriation measures or revenue bills will be incorporated into the actual year-end surplus and deficit — and thereby affect the economy — as much as those that are. All of this is ultimately within the control of Congress.

Make no mistake: Over the years, Congress has imposed numerous rules and procedures to control spending — the 1985 Balanced Budget and Emergency Deficit Control Act and various forms of PAYGO, to cite but two. And we know how those turned out. A budget may not be a panacea, but it is a step in the right direction.

Nearly all governments in our country, from the smallest of villages to the largest of states, adopt budgets and prepare year-end actual-to-budget comparisons. We should expect no less from the federal government.

Michael H. Granof is the EY Distinguished Professor of Accounting Emeritus at the University of Texas. He served a 10-year term as a member of the Federal Accounting Standards Advisory Board.

Note - below are excerpts from the article “Will This Customer Sink Your Stock?” that I would like you to think about as we dissect the Sales Volume Variance in class…

Will This Customer Sink Your Stock?
Here's a way to grab competitive advantage: Figure out how profitable your customers really are.

Larry Selden and Geoffrey Colvin
Fortune

Who are your unprofitable customers? We recently asked that question of top executives at one of America's biggest retailers. They responded defiantly that they had no unprofitable customers. Understand that this company was in trouble - it wasn't even earning enough to cover its cost of capital, Wall Street analysts were beating it up, and its stock was performing worse than the shares of most competitors. Yet its leaders insisted that through some dark financial voodoo, millions of profitable customers somehow added up to an unprofitable company.

The truth - which shocked them - was that some of their customers were deeply unprofitable. Simply doing business with certain customers was reducing the firm's profits and shareholder value. Other customers were fabulously profitable - but the effect of the bad-news buyers was overwhelming them. The retailer's managers didn't understand any of this. They didn't understand that their customer strategy - their whole plan for acquiring, maintaining, and developing customers - was determining their customer profitability, and crucially, that their customer profitability was in tum determining their share price. Because the company didn't understand these connections, it was, among other serious errors, aiming marketing efforts at customers who weren't profitable and probably never would be. Here's how ridiculous the situation was: This company was actually spending money to bring in customers who were reducing the value of the firm.

Get ready for a big idea…managing the enterprise not as a collection of products and services, not as a group of territories, but as a portfolio of customers. Of course, managers have always known that some customers are more profitable than others. But it's amazing how many executives, like those of that big retailer, haven't the least idea just how profitable (or unprofitable) individual customers or customer segments are.

Most managers don't understand how their customer portfolio determines their ultimate bottom line: the value of the company. Believe it or not, it's entirely typical to find that just the best 20% of a company's customers generate a huge portion of its share price - in some cases, all of it. The trouble is, the worst 20% may destroy a ton of value, with the middle 60% making up the difference. Until a company starts managing its highly diverse customer portfolio, it can't hope to maximize shareholder value.

…Fidelity Investments (an early adopter of this mindset)… realized that some customers were unprofitable because of the channels they used to interact with the company. When a customer who does limited business with Fidelity, and probably has limited potential, calls a service rep too frequently, the costs can easily outstrip any profits.

So… when such customers called, Fidelity's reps began teaching them how to use the company's lowest-cost channels… its website. It also made its site friendlier and more enticing to use. These customers could still talk to service reps, but the phone system identified their calls and routed them into longer queues, so the most-profitable customers could be served more quickly; for the unprofitable customers, the longer wait would be a disincentive to call.

Fidelity couldn't lose. If the unprofitable customers switched to lower-cost channels, they became profitable. If they didn't like the new experience and left, Fidelity became more profitable without them. But Fidelity found that 96% of those customers stayed, about the same retention rate as in the industry overall, and most of them switched to lower-cost channels. Over time, customer satisfaction actually increased for the smaller customers as they learned how to save time and get faster service through the lower-cost channels, increasing Fidelity's operating profit within 12 months.

Note that because Fidelity could allocate resources based on customer profitability and potential, it could have its cake and eat it too: Unprofitable customers became profitable, and profitable customers got better service through shorter wait times when calling. This is typical of companies that make the kind of change Fidelity did. By contrast, when companies don't understand customer profitability, they suffer a double whammy. Resources get squandered on unprofitable customers, which means the profitable ones get short shrift and become less satisfied.

Here's another example... Royal Bank of Canada, the largest bank in that country, reorganized itself not around products or territories but around customer segments. This focus on customer profitability revealed a large opportunity the bank had been missing. When clients from its elderly and well-off "wealth preserver" segment died, their assets passed to their heirs, who tended to be concentrated in one of the bank's most profitable customer segments, which it calls "builders and borrowers." But the bank wasn't satisfied with its retention of those assets; many heirs were not Royal Bank customers, and others were transferring the assets to other institutions.

…the bank thoroughly revised the experience it offers current and potential customers who have to settle estates. The process can involve tons of paperwork, so the bank made it easier and more efficient. Since settling an estate is a chore that most people don't know much about, and one that can be emotionally draining, the bank offered financial advice and planning to guide them through it… the bank increased its retention of assets from 30% to 50% and attracted new assets equal to another 25%.

...

Financial services are one thing. But it's harder for many people to conceptualize how analyzing and acting on customer profitability might work in retailing. Retailers sometimes throw up their hands and ask, "What can I do - put a bouncer at the door to keep unprofitable customers out?"

Probably not, but retailers can do far more than they may imagine. We know a retailer that ran a loyalty program based on how much customers spent. Analyzing their profitability showed that many of the biggest spenders - the top tier in the loyalty program - were deeply unprofitable, often because they bought only sale items and made loads of returns. So, the obvious first step for this retailer was to stop sending these customers announcements of big upcoming "private" sales. The company had been promoting such events heavily to its top-tier group, not realizing that actually doing less business with some of them would increase profits.

The retailer also found ways to do more business with its most profitable customers. For example, a woman who buys $10,000 of full-price dresses each year but buys no shoes is a clear opportunity - because she's probably buying a lot of shoes somewhere. So, the company could promote its shoe department to her and make sure salespeople mentioned the department to her in the store. The retailer could also take steps to tum unprofitable customers into profitable ones by trying to bundle profitable products with the unprofitable ones that the customers typically buy, based on AI of frequent product pairings. This is "You want fries with that?" on steroids.

If understanding customer profitability is so valuable, how could the top managers of the major retailer we mentioned ear1ier have felt so certain - and been so wrong - about all their customers' being profitable? These executives said that all their products had positive gross margins, and the company managed inventories well, so tons of capital weren't tied up. Thus, they reasoned, no matter what baskets of goods customers bought, they must all be profitable.

The trouble was that these managers were ignoring important costs. Start with the store's operating expenses: sales associates, rent, electricity, maintenance, and so on. If the shoe department uses 10% of those resources, it should bear 10% of the operating costs. When our retailer began to allocate those expenses… the company found that 25% of its product categories were unprofitable, many very unprofitable. Applying charges for capital - inventories, plus things like store improvements - yielded what finance experts call economic profit. It turned out that more than half its product categories were generating negative economic profit!

Using credit card data and simple observation in stores, the company began to analyze baskets of goods bought by a varied sample of customers. It found that some of them chronically bought mostly unprofitable products. Those customers were unprofitable. The retailer also found that some customers made lots of returns, behavior that could make profitable baskets unprofitable; others bought only items that were on sale. Also unprofitable were customers who tied up sales associates but didn't buy anything.

When companies fail to understand customer profitability, they do worse than just miss big opportunities; they can also get themselves into deep trouble. We've observed two especially dangerous traps (for more, see "5 ways to fail" at the end of this article).

The growth illusion.
Imagine a company that launches a big push for new customers and acquires 5,000 of them at a cost of $1,000 each. That amount is what the company spends on advertising, promotion… and so forth to get those customers in the door. (The company might spend $100 reaching each prospect but succeed with just one in ten.) To keep things simple we'll assume that the new customers don't produce any business in the year in which they're acquired, so the company's operating profit is $5 million lower than it otherwise would have been. That is, it has invested $5 million in the hope of realizing much more than $5 million in future profits.

Suppose this company typically holds its customers for three years, and it earns profits of $300 per year from each customer. Obviously, the company is losing money; it's earning $900 on customers that cost $1,000 to acquire, and that's not even discounting the future earnings to reflect the time value of money.

Yet remarkable as it may seem, the company's investors and even its managers, looking at conventional operating results rather than at customer profitability, might not know for years that anything is wrong. Why not? Suppose that in its second year the company acquires just 1,000 more customers, again at a cost of $1,000 each, or $1 million. Since the 5,000 recently acquired customers bring in a profit of $300 each for a total of $1.5 million, the company shows a profit increase of $500,000. That's a nice change from the previous year's decline and the beginning of a good-looking trend line. It gets better. Suppose that in the next year the company again acquires 1,000 new customers for $1 million. Now it has 6,000 new customers bringing in profits ($1M million total) and shows a profit increase of $300,000 over the previous year. Repeat the pattern once more, and profits again rise $300,000 over the previous year.

This company looks like a star. Investors are frantic to buy the stock. The directors are paying management zillions. Yet every new customer is unprofitable. The more customers the company adds, the more value it destroys.

Obviously, this situation can't last forever. The 5,000 customers acquired in the big campaign, having stayed for three years, leave; if the company keeps adding 1,000 customers a year, and the cost and profit characteristics 'remain unchanged, it suddenly falls into a steady state of losing $100,000 a year (that's before capital charges, which would make the value destruction even worse). The stock collapses, top management gets fired, and everyone is marveling at how a company could go into the tank so fast.

… What scares so many managers we talk to is that they have no idea whether they're facing this disaster, because they don't know how to look across their firm's products, regions, and sales channels to understand customer profitability. They don't know what it costs them to acquire customers or how long they hold customers or what it costs to maintain them, so they have no idea how much money they make (or lose) on each one.

The illusion of averages.

In our growth illustration above, we assumed for simplicity that all customers were economically the same. In reality that's never the case. The profitability of a company's customers often varies radically. For example, at Royal Bank just 17% of customers account for 93% of the bank's profits. Occasionally a company will calculate a rough measure of average customer profitability, but because profitability is so unevenly distributed, acting on an average number may do more harm than good.

To see why, consider two struggling companies, A and B. The economic profitability of the average customer at each company is the same: <$15>. Yet this average figure masks two radically different customer portfolios. Suppose that at company A, every customer is yielding this same dismal economic profit of <$15>. But at company B, half the customers are generating economic profit of $80 each, while the other half are yielding economic profit of <$110> each, combining to create the <$15> average.

While the averages for A and B are the same, the implications are vastly different. Company A can't earn an economic profit with any customers and thus faces a bleak future. Company B, by contrast, is tremendously successful with half its customers and performing disastrously with the other half. If company B's managers can figure out which customers are in which group and why, and then focus on adding more great customers and doing more business with them, while converting or losing the terrible customers, they have a great story for investors. This type of customer de-averaging represents a powerful new way for companies such as B to allocate resources in ways that will turbocharge profits.

Managers aren't the only ones who need better knowledge of customer profitability. Investors do too. They'd love to screen their holdings with the kind of analysis outlined above, but they can't. In today's environment many companies are publishing far more data than before, but they're still excluding a few pieces of extraordinarily valuable information: customer-acquisition costs, maintenance costs, length of customer relationships, and some sense of how customer profitability is distributed…

<u>5 ways to fail</u>

Many companies try hard to be customer-centric, but their efforts don't make their shares go up. The reason: They're committing some - and frequently all - of these five sins. Are you?

Denial

Do you insist that the differences in the profitability of your customers aren't important or aren't measurable? Do you deny that you have unprofitable customers? If you try to measure customer profitability, do you exclude some operating or capital costs?

The Growth Illusion

Are you adding lots of new customers without knowing how much they cost to acquire or how long they're likely to stay? Most important, are you clueless about the economic profit (operating profit minus a capital charge) you can expect from each new customer?

The Illusion of Averages

Do you make decisions based on average customer profitability? Are you ignorant of how much economic profit comes from the best 20% and the worst 20% of your customers? Are you unsure about which specific elements of customer behavior cause customers to fall into the top and bottom groups?

Failure to Act

Do you fail to make specific managers fully accountable for acting on customer profitability? Is your strategic plan disconnected from the economic profitability of customers or customer segments?

Failure to Drive Share Price

Have you stopped short of figuring out how much each customer segment contributes to your share price and then using that knowledge to drive the price up? Have you failed to tell your board and your investors how you're using your knowledge of customer profitability?

LARRY SELDEN is a professor at Columbia University's business school; GEOFFREY COLVIN is FORTUNE's editorial director.

Note from Brian Lendecky – companies have been attempting to "study" their customers well before "data analytics" and website search history and cookies. This article is from 2004.

Minding the Store: Analyzing Customers, Best Buy Decides Not All Are Welcome --- Retailer Aims to Outsmart Dogged Bargain-Hunters, And Coddle Big Spenders --- Looking for `Barrys' and `Jills'

By Gary McWilliams
8 November 2004
The Wall Street Journal
English

BEST BUY Co. had net income of $705 million in the fiscal year that ended in February 2004 and $570 million in fiscal 2002. A page-one article Monday transposed the net income figures.

Brad Anderson, chief executive officer of Best Buy Co., is embracing a heretical notion for a retailer. He wants to separate the "angels" among his 1.5 million daily customers from the "devils."

Best Buy's angels are customers who boost profits at the consumer-electronics giant by snapping up high-definition televisions, portable electronics, and newly released DVDs without waiting for markdowns or rebates.

The devils are its worst customers. They buy products, apply for rebates, return the purchases, then buy them back at returned-merchandise discounts. They load up on "loss leaders," severely discounted merchandise designed to boost store traffic, then flip the goods at a profit on eBay. They slap down rock-bottom price quotes from Web sites and demand that Best Buy make good on its lowest-price pledge. "They can wreak enormous economic havoc," says Mr. Anderson.

Best Buy estimates that as many as 100 million of its 500 million customer visits each year are undesirable. And the 54-year-old chief executive wants to be rid of these customers.

Mr. Anderson's new approach upends what has long been standard practice for mass merchants. Most chains use their marketing budgets chiefly to maximize customer traffic, in the belief that more visitors will lift revenue and profit. Shunning customers -- unprofitable or not -- is rare and risky.

Mr. Anderson says the new tack is based on a business-school theory that advocates rating customers according to profitability, then dumping the up to 20% that are unprofitable. The financial-services industry has used a variation of that approach for years, lavishing attention on its best customers and penalizing its unprofitable customers with fees for using ATMs or tellers or for obtaining bank records.

Best Buy seems an unlikely candidate for a radical makeover. With $24.5 billion in sales last year, the Richfield, Minn., company is the nation's top seller of consumer electronics. Its big, airy stores and wide inventory have helped it increase market share, even as rivals such as Circuit City Stores Inc. and Sears, Roebuck & Co., have struggled. In the 2004 fiscal year that ended in February, Best Buy reported net income of $570 million, up from $99 million during the year-earlier period marred by an unsuccessful acquisition, but still below the $705 million it earned in fiscal 2002.

But Mr. Anderson spies a hurricane on the horizon. Wal-Mart Stores Inc., the world's largest retailer, and Dell Inc., the largest personal-computer maker, have moved rapidly into high-definition televisions and portable electronics, two of Best Buy's most profitable areas. Today, they rank respectively as the nation's second- and fourth-largest consumer-electronics sellers.

Mr. Anderson worries that his two rivals "are larger than us, have a lower [overhead], and are more profitable." In five years, he fears, Best Buy could wind up like Toys `R' Us Inc., trapped in what consultants call the "unprofitable middle," unable to match Wal-Mart's sheer buying power, while low-cost online sellers like Dell pick off its most affluent customers. Toys `R' Us recently announced it was considering exiting the toy business.

This year, Best Buy has rolled out its new angel-devil strategy in about 100 of its 670 stores. It is examining sales records and demographic data and sleuthing through computer databases to identify good and bad customers. To lure the high-spenders, it is stocking more merchandise and providing more appealing service. To deter the undesirables, it is cutting back on promotions and sales tactics that tend to draw them, and culling them from marketing lists.

As he prepares to roll out the unconventional strategy throughout the chain, Mr. Anderson faces significant risks. The pilot stores have proven more costly to operate. Because different pilot stores target different types of customers, they threaten to scramble the chain's historic economies of scale. The trickiest challenge may be to deter bad customers without turning off good ones.

"Culturally I want to be very careful," says Mr. Anderson. "The most dangerous image I can think of is a retailer that wants to fire customers."

Mr. Anderson's campaign against devil customers pits Best Buy against an underground of bargain-hungry shoppers intent on wringing every nickel of savings out of big retailers. At dozens of Web sites like FatWallet.com, SlickDeals.net and TechBargains.com, they trade electronic coupons and tips from former clerks and insiders, hoping to gain extra advantages against the stores.

At SlickDeals.net, whose subscribers boast about techniques for gaining hefty discounts, a visitor recently bragged about his practice of shopping at Best Buy only when he thinks he can buy at below the retailer's cost. He claimed to purchase only steeply discounted loss leaders, except when forcing Best Buy to match rock-bottom prices advertised elsewhere. "I started only shopping there if I can [price match] to where they take a loss," he wrote, claiming he was motivated by an unspecified bad experience with the chain. In an e-mail exchange, he declined to identify himself or discuss his tactics, lest his targets be forewarned.

Mr. Anderson's makeover plan began taking shape two years ago when the company retained as a consultant Larry Selden, a professor at Columbia University's Graduate School of Business. Mr. Selden has produced research tying a company's stock-market value to its ability to identify and cater to profitable customers better than its rivals do. At many companies, Mr. Selden argues, losses produced by devil customers wipe out profits generated by angels.

Best Buy's troubled acquisitions of MusicLand Stores Corp. and two other retailers had caused its share price and price-to-earnings ratio to tumble. Mr. Selden recalls advising Mr. Anderson: "The best time to fix something is when you're still making great money but your [price-to-earnings ratio] is going down."

Mr. Selden had never applied his angel-devil theories to a retailer as large as Best Buy, whose executives were skeptical that 20% of customers could be unprofitable. In mid-2002, Mr. Selden outlined his theories during several weekend meetings in Mr. Anderson's Trump Tower apartment. Mr. Anderson was intrigued by Mr. Selden's insistence that a company should view itself as a portfolio of customers, not product lines.

Mr. Anderson put his chief operating officer in charge of a task force to analyze the purchasing histories of several groups of customers, with an eye toward identifying bad customers who purchase loss-leading merchandise and return purchases. The group discovered it could distinguish the angels from the devils, and that 20% of Best Buy's customers accounted for the bulk of profits.

In October 2002, Mr. Anderson instructed the president of Best Buy's U.S. stores, Michael P. Keskey, to develop a plan to realign stores to target distinct groups of customers rather than to push a uniform mix of merchandise. Already deep into a cost-cutting program involving hundreds of employees, Mr. Keskey balked, thinking his boss had fallen for a business-school fad. He recalls telling Mr. Anderson, "You've lost touch with what's happening in your business."

Mr. Anderson was furious, and Mr. Keskey says he wondered whether it was time to leave the company. But after meeting with the chief operating officer and with Mr. Selden, Mr. Keskey realized there was no turning back, he says.

Best Buy concluded that its most desirable customers fell into five distinct groups: upper-income men, suburban mothers, small-business owners, young family men, and technology enthusiasts. Mr. Anderson decided that each store should analyze the demographics of its local market, then focus on two of these groups and stock merchandise accordingly.

Best Buy began working on ways to deter the customers who drove profits down. It couldn't bar them from its stores. But this summer it began taking steps to put a stop to their most damaging practices. It began enforcing a restocking fee of 15% of the purchase price on returned merchandise. To discourage customers who return items with the intention of repurchasing them at an "open-box" discount, it is experimenting with reselling them over the Internet, so the goods don't reappear in the store where they were originally purchased.

"In some cases, we can solve the problem by tightening up procedures so people can't take advantage of the system," explains Mr. Anderson.

In July, Best Buy cut ties to FatWallet.com, an online "affiliate" that had collected referral fees for delivering customers to Best Buy's Web site. At FatWallet.com, shoppers swap details of loss-leading merchandise and rebate strategies. Last October, the site posted Best Buy's secret list of planned Thanksgiving weekend loss leaders, incurring the retailer's ire.

Timothy C. Storm, president of Roscoe, Ill.-based FatWallet, said the information may have leaked from someone who had an early look at advertisements scheduled to run the day after Thanksgiving.

In a letter to Mr. Storm, Best Buy explained it was cutting the online link between FatWallet and BestBuy.com because the referrals were unprofitable. The letter said it was terminating all sites that "consistently and historically have put us in a negative business position."

Mr. Storm defends FatWallet.com's posters as savvy shoppers. "Consumers don't set the prices. The merchants have complete control over what their prices and policies are," he says.

Shunning customers can be a delicate business. Two years ago, retailer Filene's Basement was vilified on television and in newspaper columns for asking two Massachusetts customers not to shop at its stores because of what it said were frequent returns and complaints. Earlier this year, Mr. Anderson apologized in writing to students at a Washington, D.C., school after employees at one store barred a group of black students while admitting a group of white students.

Mr. Anderson says the incident in Washington was inappropriate and not a part of any customer culling. He maintains that Best Buy will first try to turn its bad customers into profitable ones by inducing them to buy warranties or more profitable services. "In most cases, customers wouldn't recognize the options we've tried so far," he says.

Store clerks receive hours of training in identifying desirable customers according to their shopping preferences and behavior. High-income men, referred to internally as Barrys, tend to be enthusiasts of action movies and cameras. Suburban moms, called Jills, are busy but usually willing to talk about helping their families. Male technology enthusiasts, nicknamed Buzzes, are early adopters, interested in buying and showing off the latest gadgets.

Staffers use quick interviews to pigeonhole shoppers. A customer who says his family has a regular "movie night," for example, is pegged a prime candidate for home-theater equipment. Shoppers with large families are steered toward larger appliances and time-saving products.

The company hopes to lure the Barrys and Jills by helping them save time with services like a "personal shopper" to help them hunt for unusual items, alert them to sales on preferred items, and coordinate service calls.

Best Buy's decade-old Westminster, Calif., store is one of 100 now using the new approach. It targets upper-income men with an array of pricey home-theater systems, and small-business owners with network servers, which connect office PCs, and technical help unavailable to other customers.

On Tuesdays, when new movie releases hit the shelves, blue-shirted sales clerks prowl the DVD aisles looking for promising candidates. The goal is to steer them into a back room that showcases $12,000 high-definition home-theater systems. Unlike the television sections at most Best Buy stores, the room has easy chairs, a leather couch, and a basket of popcorn to mimic the media rooms popular with home-theater fans.

At stores popular with young Buzzes, Best Buy is setting up videogame areas with leather chairs and game players hooked to mammoth, plasma-screen televisions. The games are conveniently stacked outside the playing area, the glitzy new TVs a short stroll away.

Mr. Anderson says early results indicate that the pilot stores "are clobbering" the conventional stores. Through the quarter ended Aug. 28, sales gains posted by pilot stores were double those of traditional stores. In October, the company began converting another 70 stores.

Best Buy intends to customize the remainder of its stores over the next three years. As it does, it will lose the economies and efficiencies of look-alike stores. With each variation, it could become more difficult to keep the right items in stock, a critical issue in a business where a shortage of a hot-selling big-screen TV can wreak havoc on sales and customer goodwill.

Overhead costs at the pilot stores have run one to two percentage points higher than traditional stores. Sales specialists cost more, as do periodic design changes. Mr. Anderson says the average cost per store should fall as stores share winning ideas for targeting customers.

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BEST OF HBR 1992

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The Balanced Scorecard

Measures That Drive Performance

by Robert S. Kaplan and David P. Norton

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Measures That Drive Performance

by Robert S. Kaplan and David P. Norton

By the 1980s, many executives were convinced that traditional measures of financial performance didn't let them manage effectively and wanted to replace them with operational measures. Arguing that executives should track both financial and operational metrics, Robert Kaplan and David Norton suggested four sets of parameters.

First, how do customers see your company? Find out by measuring lead times, quality, performance and service, and costs. Second, what must your company excel at? Determine the processes and competencies that are most critical, and specify measures, such as cycle time, quality, employee skills, and productivity, to track them. Third, can your company continue to improve and create value? Monitor your ability to launch new products, create more value for customers, and improve operating efficiencies. Fourth, how has your company done by its shareholders? Measure cash flow, quarterly sales growth, operating income by division, and increased market share by segment and return on equity.

The balanced scorecard lets executives see whether they have improved in one area at the expense of another. Knowing that, say the authors, will protect companies from posting suboptimal performance.

What you measure is what you get. Senior executives understand that their organization's measurement system strongly affects the behavior of managers and employees. Executives also understand that traditional financial accounting measures like return on investment and earnings per share can give misleading signals for continuous improvement and innovation—activities today's competitive environment demands. The traditional financial performance measures worked well for the industrial era, but they are out of step with the skills and competencies companies are trying to master today.

As managers and academic researchers have tried to remedy the inadequacies of current performance measurement systems, some have focused on making financial measures more relevant. Others have said, "Forget the financial measures; improve operational measures like cycle time and defect rates. The financial results will follow." But managers should not have to choose between financial and operational measures. In observing and working with many companies, we have found that senior executives do not rely on one set of measures to the exclusion of the other. They realize that no single measure can provide a clear performance target or focus attention on the critical areas of the business. Managers want a balanced presentation of both financial and operational measures.

During a yearlong research project with 12 companies at the leading edge of performance measurement, we devised a "balanced scorecard"—a set of measures that gives top managers a fast but comprehensive view of the business. The balanced scorecard includes financial measures that tell the results of actions already taken. And it complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and improvement activities—operational measures that are the drivers of future financial performance.

Think of the balanced scorecard as the dials and indicators in an airplane cockpit. For the complex task of navigating and flying a plane, pilots need detailed information about many aspects of the flight. They need information on fuel, airspeed, altitude, bearing, destination, and other indicators that summarize the current and predicted environment. Reliance on one instrument can be fatal. Similarly, the complexity of managing an organization today requires that managers be able to view performance in several areas at once.

The balanced scorecard allows managers to look at the business from four important perspectives. (See the exhibit "The Balanced Scorecard Links Performance Measures.") It provides answers to four basic questions:

- How do customers see us? (customer perspective)
- What must we excel at? (internal business perspective)
- Can we continue to improve and create value? (innovation and learning perspective)
- How do we look to shareholders? (financial perspective)

While giving senior managers information from four different perspectives, the balanced scorecard minimizes information overload by limiting the number of measures used. Companies rarely suffer from having too few measures. More commonly, they keep adding new measures whenever an employee or a consultant makes a worthwhile suggestion. One manager described the proliferation of new measures at his company as its "kill another tree program." The balanced scorecard forces managers to focus on the handful of measures that are most critical.

Several companies have already adopted the balanced scorecard. Their early experiences using the scorecard have demonstrated that it meets several managerial needs. First, the scorecard brings together, in a single management report, many of the seemingly disparate elements of a company's competitive agenda: becoming customer oriented, shortening response time, improving quality, emphasizing teamwork, reducing new product launch times, and managing for the long term.

Second, the scorecard guards against suboptimization. By forcing senior managers to consider all the important operational measures together, the balanced scorecard lets them see whether improvement in one area may have been achieved at the expense of another. Even the best objective can be achieved badly. Companies can reduce time to market, for example, in two very different ways: by improving the management of new product introductions or by releasing only products that are incrementally different from existing products. Spending on setups can be cut either by reducing setup times or by increasing batch sizes. Similarly, production output and first-pass yields can rise, but the increases may be due to a shift in the product mix to more standard, easy-to-produce but lower-margin products.

We will illustrate how companies can create their own balanced scorecard with the experiences of one semiconductor company—let's call it Electronic Circuits Incorporated. ECI saw the scorecard as a way to clarify, simplify, and then operationalize the vision at the top of the organization. The ECI scorecard was designed to focus the attention of its top executives on a short list of critical indicators of current and future performance.

Customer Perspective: How Do Customers See Us?

Many companies today have a corporate mission that focuses on the customer. "To be number one in delivering value to customers" is a typical mission statement. How a company is

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performing from its customers' perspective has become, therefore, a priority for top management. The balanced scorecard demands that managers translate their general mission statement on customer service into specific measures that reflect the factors that really matter to customers.

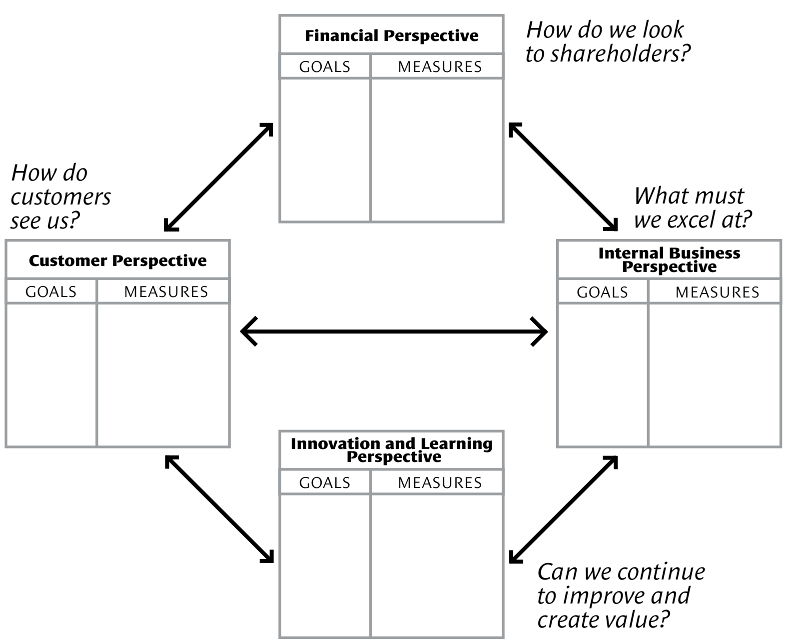
Customers' concerns tend to fall into four categories: time, quality, performance and service, and cost. Lead time measures the time required for the company to meet its customers' needs. For existing products, lead time can be measured from the time the company receives an order to the time it actually delivers the product or service to the customer. For new products, lead time represents the time to market, or how long it takes to bring a new product from the product definition stage to the start of shipments. Quality measures the defect level of incoming products as perceived and measured by the customer. Quality could also measure on-time delivery—the accuracy of the organization's delivery forecasts. The combination of performance and service measures how the company's products or services contribute to creating value for its customers.

To put the balanced scorecard to work, companies should articulate goals for time, quality, and performance and service and then translate these goals into specific measures. Senior managers at ECI, for example, established general goals for customer performance: Get standard products to market sooner, improve customers' time to market, become customers' supplier of choice through partnerships with them, and develop innovative products tailored to customer needs. The managers translated these general goals into four specific goals and identified an appropriate measure for each. (See the exhibit "ECI's Balanced Business Scorecard.")

To track the specific goal of providing a continuous stream of attractive solutions, ECI measured the percentage of sales from new products and the percentage of sales from proprietary products. That information was available internally, but certain other measures forced the company to get data from outside. To assess whether the company was achieving its goal of providing reliable, responsive supply, ECI turned to its customers. When it found that each customer defined "reliable, responsive supply" differently, ECI created a database of the factors as defined by each of its major customers. The shift to external measures of performance with customers led ECI to redefine "on time" so it matched customers' expectations. Some customers defined "on time" as any shipment that arrived within five days of scheduled delivery; others used a nine-day window. ECI itself had been using a seven-day window, which meant that it wasn't satisfying some of its customers and overachieving for others. ECI also asked its top ten customers to rank the company as a supplier overall.

Depending on customers' evaluations to define some of a company's performance measures forces that company to view its performance through customers' eyes. Some companies hire third parties to perform anonymous customer surveys, resulting in a customer-driven report card. The J.D. Power quality survey, for example, has become the standard of performance for the automobile industry, while the U.S. Department of Transportation's measurement of on-time arrivals and lost baggage provides external standards for airlines. Benchmarking procedures are yet another technique companies use to compare their performance against competitors' best practices. Many companies have introduced "best of breed" comparison programs: The company looks to one in-

The Balanced Scorecard Links Performance Measures



dustry to find, say, the best distribution system, to another industry for the lowest cost payroll process, and then forms a composite of those best practices to set objectives for its own performance.

In addition to measures of time, quality, and performance and service, companies must remain sensitive to the cost of their products. But customers see price as only one component of the cost they incur when dealing with their suppliers. Other supplier-driven costs range from ordering, scheduling delivery, and paying for the materials; to receiving, inspecting, handling, and storing the materials; to the scrapping, reworking, and obsolescence caused by the materials; and schedule disruptions (expediting and value of lost output) from incorrect deliveries. An excellent supplier may charge a higher unit price for products than other vendors but nonetheless be a lower cost supplier because it can deliver defect-free products in exactly the right quantities at exactly the right time directly to the production process and can minimize, through electronic data interchange, the administrative hassles of ordering, invoicing, and paying for materials.

ECI's Balanced Business Scorecard

Financial Perspective

GOALS	MEASURES
Survive	Cash flow
Succeed	Quarterly sales growth and operating income by division
Prosper	Increased market share and ROE

Customer Perspective

GOALS	MEASURES
New products	Percentage of sales from new products
	Percentage of sales from proprietary products
Responsive supply	On-time delivery (defined by customer)
Preferred suppliers	Share of key accounts' purchases
	Ranking by key accounts
Customer partnerships	Number of cooperative engineering efforts

Internal Business Perspective

GOALS	MEASURES
Technology capability	Manufacturing geometry versus competition
Manufacturing excellence	Cycle time, unit cost, yield
Design productivity	Silicon efficiency, engineering efficiency
New product introduction	Actual introduction schedule versus plan

Innovation and Learning Perspective

GOALS	MEASURES
Technology leadership	Time to develop next generation
Manufacturing learning	Process time to maturity
Product focus	Percentage of products that equal 80% of sales
Time to market	New product introduction versus competition

Internal Business Perspective: What Must We Excel At?

Customer-based measures are important, but they must be translated into measures of what the company must do internally to meet its customers' expectations. After all, excellent customer performance derives from processes, decisions, and actions occurring throughout an organization. Managers need to focus on those critical internal operations that enable them to satisfy customer needs. The second part of the balanced scorecard gives managers that internal perspective.

The internal measures for the balanced scorecard should stem from the business processes that have the greatest impact on customer satisfaction—factors that affect cycle time, quality, employee skills, and productivity, for example. Companies should also attempt to identify and measure their company's core competencies, the critical technologies needed to ensure continued market leadership. Companies should decide what processes and competencies they must excel at and specify measures for each.

Managers at ECI determined that submicron technology capability was critical to its market position. They also decided that they had to focus on manufacturing excellence, design productivity, and new product introduction. The company developed operational measures for each of these four internal business goals.

To achieve goals on cycle time, quality, productivity, and cost, managers must devise measures that are influenced by employees' actions. Since much of the action takes place at the department and workstation levels, managers need to decompose overall cycle time, quality, product, and cost measures to local levels. That way, the measures link top management's judgment about key internal processes and competencies to the actions taken by individuals that affect overall corporate objectives. This linkage ensures that employees at lower levels in the organization have clear targets for actions, decisions, and improvement activities that will contribute to the company's overall mission.

Information systems play an invaluable role in helping managers disaggregate the summary measures. When an unexpected signal appears on the balanced scorecard, executives can query their information system to find the source of the trouble. If the aggregate measure for on-time delivery is poor, for example, executives with a good information system can quickly look behind the aggregate measure until they can identify late deliveries, day by day, by a particular plant to an individual customer.

If the information system is unresponsive, however, it can be the Achilles' heel of performance measurement. Managers at ECI are currently limited by the absence of such an operational information system. Their greatest concern is that the scorecard information is not timely; reports are generally a week behind the company's routine management meetings, and the measures have yet to be linked to measures for managers and employees at lower levels of the organization. The company is in the process of developing a more responsive information system to eliminate this constraint.

Innovation and Learning Perspective: Can We Continue to Improve and Create Value?

The customer-based and internal business process measures on the balanced scorecard identify the parameters that the company considers most important for competitive success. But the targets for success keep changing. Intense global competition requires that companies make continual improvements to their existing products and processes and have the ability to introduce entirely new products with expanded capabilities.

A company's ability to innovate, improve, and learn ties directly to the company's value. That is, only through the ability to launch new products, create more value for customers, and improve operating efficiencies continually can a company penetrate new markets and increase revenues and margins—in short, grow and thereby increase shareholder value.

ECI's innovation measures focus on the company's ability to develop and introduce standard products rapidly, products that the company expects will form the bulk of its future sales. Its manufacturing improvement measure focuses on new products; the goal is to achieve stability in the manufacturing of new products rather than to improve manufacturing of existing products. Like many other companies, ECI uses the percentage of sales from new products as one of its innovation and improvement measures. If sales from new products are trending downward, managers can explore whether problems have arisen in new product design or new product introduction.

In addition to measures on product and process innovation, some companies overlay specific improvement goals for their existing processes. For example, Analog Devices, a Massachusetts-based manufacturer of specialized semiconductors, expects managers to improve their customer and internal business process performance continuously. The company estimates specific rates of improvement for on-time delivery, cycle time, defect rate, and yield.

Other companies, like Milliken & Company, require that managers make improvements within a specific time period. Milliken did not want its "associates" (Milliken's word for employees) to rest on their laurels after winning the Baldrige Award. Chairman and CEO Roger Milliken asked each plant to implement a "ten four" improvement program: Measures of process defects, missed deliveries, and scrap were to be reduced by a factor of ten over the next four years. These targets emphasize the role

Other Measures for the Customer's Perspective

- A computer manufacturer wanted to be the competitive leader in customer satisfaction, so it measured competitive rankings. The company got the rankings through an outside organization hired to talk directly with customers. The company also wanted to do a better job of solving customers' problems by creating more partnerships with other suppliers. It measured the percentage of revenue from third-party relationships.
- The customers of a producer of very expensive medical equipment demanded high reliability. The company developed two customer-based metrics for its operations: equipment up-time percentage and mean-time response to a service call.
- A semiconductor manufacturer asked each major customer to rank the company against comparable suppliers on efforts to improve quality, delivery time, and price performance. When the chip maker discovered it ranked in the middle, managers made improvements that moved the company to the top of customers' rankings.

for continuous improvement in customer satisfaction and internal business processes.

Financial Perspective: How Do We Look to Shareholders?

Financial performance measures indicate whether the company's strategy, implementation, and execution are contributing to bottom-line improvement. Typical financial goals have to do with profitability, growth, and shareholder value. ECI stated its financial goals simply: to survive, to succeed, and to prosper. Survival was measured by cash flow, success by quarterly sales growth and operating income by division, and prosperity by increased market share by segment and return on equity.

But given today's business environment, should senior managers even look at the business from a financial perspective? Should they pay attention to short-term financial measures like quarterly sales and operating income? Many have criticized financial measures because of their well-documented inadequacies, their backward-looking focus, and their inability to reflect contemporary value-creating actions. Shareholder value analysis (SVA), which forecasts future cash flows and discounts them back to a rough estimate of current value, is an attempt to make financial analysis more forward-looking. But SVA still is based on cash flow rather than on the activities and processes that drive cash flow.

Some critics go much further in their indictment of financial measures. They argue that the terms of competition have changed and that traditional financial measures do not improve customer satisfaction, quality, cycle time, and employee motivation. In their view, financial performance is the result of operational actions, and financial success should be the logical consequence of doing the fundamentals well. In other words, companies should stop navigating by financial measures. By making fundamental improvements in their operations, the financial numbers will take care of themselves, the argument goes.

Assertions that financial measures are unnecessary are incorrect for at least two reasons. A well-designed financial-control system can actually enhance rather than inhibit an organization's total quality management program. (See the sidebar "How One Company Used a Daily Financial Report to Improve Quality.") More important, however, the alleged linkage between improved operating performance and financial success is actually quite tenuous and uncertain. Let us demonstrate rather than argue this point.

During the three-year period between 1987 and 1990, a NYSE electronics company made an order-of-magnitude improvement in quality an on-time delivery performance. The outgoing defect rate dropped from 500 parts per million to 50, on-time delivery improved from 70% to 96%, and yield jumped from 26% to 51%. Did these breakthrough improvements in quality, productivity, and customer service provide substantial benefits to the company? Unfortunately not. During the same three-year period, the company's financial results showed little improvement, and its stock price plummeted to one-third of its July 1987 value. The considerable improvements in manufacturing capabilities had not been translated into increased profitability. Slow releases of new products and a failure to expand marketing to new and perhaps more demanding customers prevented the company from realizing the benefits of its manufacturing achievements. The operational achievements were real, but the company had failed to capitalize on them.

The disparity between improved operational performance and disappointing finan-

Other Measures for the Internal Business Perspective

- One company recognized that the success of its total quality management (TQM) program depended on all its employees internalizing and acting on the program's messages. The company performed a monthly survey of 600 randomly selected employees to determine if they were aware of TQM, had changed their behavior because of it, believed the outcome was favorable, or had become missionaries to others.
- Hewlett-Packard uses breakeven time (BET) to measure the effectiveness of its product development cycle. BET measures the time required for all the accumulated expenses in the product and process development cycle (including equipment acquisition) to be recovered by the product's contribution margin (the selling price less manufacturing, delivery, and selling expenses).
- A major office products manufacturer, wanting to respond rapidly to changes in the marketplace, set out to reduce cycle time by 50%. Lower levels of the organization aimed to radically cut the times required to process customer orders, order and receive materials from suppliers, move materials and products between plants, make and assemble products, and deliver products to customers.

cial measures creates frustration for senior executives. This frustration is often vented at nameless Wall Street analysts who allegedly cannot see past quarterly blips in financial performance to the underlying long-term values these executives sincerely believe they are creating in their organizations. But the hard truth is that if improved performance fails to be reflected in the bottom line, executives should reexamine the basic assumptions of their strategy and mission. Not all long-term strategies are profitable strategies.

Measures of customer satisfaction, internal business performance, and innovation and improvement are derived from the company's particular view of the world and its perspective on key success factors. But that view is not necessarily correct. Even an excellent set of balanced scorecard measures does not guarantee a winning strategy. The balanced scorecard can only translate a company's strategy into specific measurable objectives. A failure to convert improved operational performance, as measured in the scorecard, into improved financial performance should send executives back to their drawing boards to rethink the company's strategy or its implementation plans.

As one example, disappointing financial measures sometimes occur because companies don't follow up their operational improvements with another round of actions. Quality and cycle-time improvements can create excess capacity. Managers should be prepared to either put the excess capacity to work or else get rid of it. The excess capacity must be either used by boosting revenues or eliminated by reducing expenses if operational improvements are to be brought down to the bottom line.

As companies improve their quality and response time, they eliminate the need to build, inspect, and rework out-of-conformance products or to reschedule and expedite delayed orders. Eliminating these tasks means that some of the people who perform them are no longer needed. Companies are understandably reluctant to lay off employees, especially since the employees may have been the source of the ideas that produced the higher quality and reduced cycle time. Layoffs are a poor reward for past improvement and can damage the morale

How One Company Used a Daily Financial Report to Improve Quality

In the 1980s, a chemicals company became committed to a total quality management program and began to make extensive measurements—of employee participation, statistical process control, and key quality indicators. Using computerized control and remote data entry systems, the plant monitored more than 30,000 observations of its production processes every four hours. The department managers and operating personnel who now had access to massive amounts of real-time operational data found their monthly financial reports to be irrelevant.

But one enterprising department manager saw things differently. He created a daily income statement. Each day, he estimated the value of the output from the production process using market prices and subtracted the expenses of raw materials, energy, and capital consumed in the production process. To approximate the cost of producing out-of-conformance product, he cut the revenues from off-spec output by 50% to 100%.

The daily financial report gave operators powerful feedback and motivation and guided their quality and productivity efforts. The department head understood that it is not always possible to improve quality, reduce energy consumption, and increase throughput simultaneously; trade-offs are usually necessary. He wanted the daily financial statement to guide those trade-offs. The difference between the input consumed and the output produced indicated the success or failure of the employees' efforts on the previous day. The operators were empowered to make decisions that might improve quality, increase productivity, and reduce consumption of energy and materials.

That feedback and empowerment had visible results. When, for example, a hydrogen compressor failed, a supervisor on the midnight shift sent an emergency repair crew into action. Previously, such a failure of a noncritical component would have been reported in the shift log, where the department manager arriving for work the following morning would have to discover it. The midnight shift supervisor knew the cost of losing the hydrogen gas and made the decision that the cost of expediting the repairs would be repaid several times over by the output produced by having the compressor back on line before morning.

The department proceeded to set quality and output records. Over time, the department manager became concerned that employees would lose interest in continually improving operations. He tightened the parameters for in-spec production and reset the prices to reflect a 25% premium for output containing only negligible fractions of impurities. The operators continued to improve the production process.

The success of the daily financial report hinged on the manager's ability to establish a financial penalty for what had previously been an intangible variable: the quality of output. With this innovation, it was easy to see where process improvements and capital investments could generate the highest returns.

Source: "Texas Eastman Company," Robert S. Kaplan, Harvard Business School case number 9-190-039.

As companies have applied the balanced scorecard, we have begun to recognize that the scorecard represents a fundamental change in the underlying assumptions about performance measurement.

of remaining workers, curtailing further improvement. But companies will not realize all the financial benefits of their improvements until their employees and facilities are working to capacity—or the companies confront the pain of downsizing to eliminate the expenses of the newly created excess capacity.

If executives fully understood the consequences of their quality and cycle-time improvement programs, they might be more aggressive about using the newly created capacity. To capitalize on this self-created new capacity, however, companies must expand sales to existing customers, market existing products to entirely new customers (who are now accessible because of the improved quality and delivery performance), and increase the flow of new products to the market. These actions can generate added revenues with only modest increases in operating expenses. If marketing and sales and R&D do not generate the increased volume, the operating improvements will stand as excess capacity, redundancy, and untapped capabilities. Periodic financial statements remind executives that improved quality, response time, productivity, or new products benefit the company only when they are translated into improved sales and market share, reduced operating expenses, or higher asset turnover.

Ideally, companies should specify how improvements in quality, cycle time, quoted lead times, delivery, and new product introduction will lead to higher market share, operating margins, and asset turnover or to reduced operating expenses. The challenge is to learn how to make such explicit linkage between operations and finance. Exploring the complex dynamics will probably require simulation and cost modeling.

Measures That Move Companies Forward

As companies have applied the balanced scorecard, we have begun to recognize that the scorecard represents a fundamental change in the underlying assumptions about performance measurement. As the controllers and finance vice presidents involved in the research project took the concept back to their organizations, the project participants found that they were not able to implement the balanced scorecard without the involvement of the senior managers who had the most complete picture of the company's vision and priorities. This was revealing, because most existing performance measurement systems have been designed and overseen by financial experts. Rarely do controllers need to have senior managers so heavily involved.

Probably because traditional measurement systems have sprung from the finance function, the systems have a control bias. That is, traditional performance measurement systems specify the particular actions they want employees to take and then measure to see whether the employees have in fact taken those actions. In that way, the systems try to control behavior. Such measurement systems fit with the engineering mentality of the industrial age.

The balanced scorecard, on the other hand, is well suited to the kind of organization many companies are trying to become. The scorecard puts strategy and vision, not control, at the center. It establishes goals but assumes that people will adopt whatever behaviors and take whatever actions are necessary to arrive at those goals. The measures are designed to pull people toward the overall vision. Senior managers may know what the end result should be, but they cannot tell employees exactly how to achieve that result, if only because the conditions in which employees operate are constantly changing.

This new approach to performance measurement is consistent with the initiatives under way in many companies: cross-functional integration, customer-supplier partnerships, global scale, continuous improvement, and team rather than individual accountability. By combining the financial, customer, internal process and innovation, and organizational learning perspectives, the balanced scorecard helps managers understand, at least implicitly, many interrelationships. This understanding can help managers transcend traditional notions about functional barriers and ultimately lead to improved decision making and problem solving. The balanced scorecard keeps companies looking—and moving—forward instead of backward.

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Putting the Balanced Scorecard to Work
Robert S. Kaplan and David P. Norton
Harvard Business Review
September–October 1993
Product no. 4118

Using the Balanced Scorecard as a Strategic Management System
Robert S. Kaplan and David P. Norton
Harvard Business Review
January–February 1996
Product no. 4126

Profit Priorities from Activity-Based Costing
Robin Cooper and Robert S. Kaplan
Harvard Business Review
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Citibank: Performance Evaluation

Frits Seegers, President of Citibank California, was meeting with his management team to review the performance evaluation and bonus decisions for the California branch managers. James McGaran's performance evaluation was next. Frits felt uneasy about this one. McGaran was manager of the most important branch in the Los Angeles area, and his financials were impressive. A year ago he would have received "above par" rating with full bonus. But last year, the California Division of Citibank had introduced a new performance scorecard to highlight the importance of a diverse set of measures in achieving the strategic goals of the division. Among the new measures introduced was a customer satisfaction indicator. Unfortunately, James McGaran had scored "below par" on customer satisfaction.

Frits looked at Lisa Johnson, the area manager supervising James McGaran. Frits had read Lisa's comments (**Exhibit 1**). The comments were very positive, but Lisa had not wanted to give a final recommendation until she had discussed it with Frits. She knew that James' case would be watched closely by many managers within the division.

The Financial District Branch

James McGaran was manager of the most important of the 31 branches in the Los Angeles area. Located in Los Angeles's financial district, James's branch had a staff of 15 people, revenues of $6 million, and $4.3 million in profit margin. The customer base was very diverse. Individual customers ranged from people who worked in the financial district with sophisticated retail banking needs to less informed individuals banking for convenience. Business customers were sophisticated buyers who demanded high service quality and knowledgeable employees who could satisfy their financial needs. "Mom and pop" businesses, the dominant segment in other regions, were also present but to a much lesser extent. Competition was intense. Two competitors—Bank of America and Wells Fargo—had offices less than a block away from James's branch.

James joined Citibank in 1985 as assistant branch manager. He had worked in the banking industry since 1977. Within a year, in 1986, he was promoted to manager of a small branch. He progressed quickly through the ranks until 1992 when he was given the responsibility of managing the Financial District office. His performance in this office had exceeded expectations every single year. He had delivered impressive financial results for four years in a row. In 1996, when the division expanded its performance indicators to include non-financial measures, it became apparent that his branch's customer satisfaction ratings did not follow the same pattern as its financial performance.

Doctoral Candidate Antonio Dávila and Professor Robert Simons prepared this case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

James reported to Lisa Johnson, Los Angeles area manager. Lisa was a long time employee of Citibank. She joined the company in 1978 in Chicago and moved to California in early 1988. Her area was the biggest in the division and included two regions that had previously been managed separately. Lisa was a hands-on manager who spent a lot of time in the branches supporting the managers and becoming familiar with the events in each branch.

New Performance Scorecard

Citibank was a niche player in the California market. It had eighty branches compared with four hundred offices of its biggest competitor. Citibank's strategy in California was to build a profitable franchise by providing relationship banking combined with a high level of service to its customers. Service was delivered face to face (in the branch) or remotely, depending on the wishes of the customers. Customers' service expectations rose in line with their net worth, as did their profitability for the bank. These customers demanded high levels of service with careful personal attention and a broad selection of financial products. Citibank provided a broad array of services including a dense network of ATM machines, 24 hour banking, and home banking.

Financial measures had dominated Citibank's performance evaluation in the past. But top managers in the division felt that these measures were poor vehicles to communicate the high service strategy of the bank. Frits Seegers wanted people in the division to have a broader view of the business and focus their attention on those dimensions that were critical to the long term success of the franchise.

To reflect the importance of non-financial measures as leading indicators of strategy implementation, the California Division developed a Performance Scorecard. It complemented existing financial measures with new measures reflecting important competitive dimensions in the bank's strategy. The initial version was pre-tested in 1995 and, starting in the first quarter of 1996, Performance Scorecard goals and performance data became a central management tool to implement strategy and evaluate performance.

The Performance Scorecard was built around six different types of measures: financial, strategy implementation, customer satisfaction, control, people, and standards (see **Exhibits 2** to **5**).

> *Financial measures* were obtained from the regular accounting system and focused primarily on total revenue and profit margin against targets.
>
> *Strategy implementation* measures tracked revenue for different types of target customer segments relevant to the strategy of the branch. James's Performance Scorecard focused primarily on revenues from retail customers—households, businesses, and professionals.
>
> *Customer satisfaction* was measured through telephone interviews with approximately twenty-five branch customers who had visited the branch during the past month. Customer satisfaction scores were derived from questions that focused on branch service as well as other Citibank services like 24 hours phone banking and ATM services. An independent research firm was responsible for administering the survey under the guidance of the division's Relationship Satisfaction department. Given the current strategy of the bank, which focused on customer service as a key differentiator, Frits Seegers considered the customer satisfaction measure as critical to the long term success of his division. He saw it as a leading indicator of future financial performance. If customer satisfaction deteriorated, it was only a matter of time before it showed in the financials.

> *Control measures* reported the evaluation by internal auditors on the branch's internal control processes. Branches had to score at least par (defined as 4 on a scale of 1 to 5) to be eligible for any bonus. If the rating was below 4, the branch's business was considered at risk and did not meet the minimum requirements for effective control.
>
> *People and Standards* were non-quantifiable ratings determined subjectively by the branch manager's boss. The "people" measure focused on the proactive efforts of the manager to develop and communicate with subordinates, to encourage area training programs, and to be a role model to more junior people. Standards included an assessment of a manager's involvement in community groups, trade associations, and business ethics.

Each component of the Scorecard was scored independently into one of three rating categories: "below par", "par", or "above par". For those measures that could be measured quantitatively—financial, strategy implementation, customer satisfaction, and control—pre-defined performance thresholds determined where performance fell in this three-level scale. However, ratings related to people and standards lacked an appropriate objective indicator: in these cases performance was determined subjectively by the branch manager's superior.

In addition, the manager's boss gave a global rating for each of the six components of the Scorecard and an overall rating for the branch manager.

Performance and Incentives

The performance planning process started in October with a negotiation process between Frits Seegers and his area managers. At the end of this initial stage, Performance Scorecard targets for the upcoming year were established for the division and for each area. These targets were cascaded down the organization. Area managers negotiated with branch managers to determine their financial targets and strategy implementation goals for the year. At the end of this process, the targets for branch managers were added up to ensure that they equaled or exceeded the area's targets.

Customer satisfaction and control goals were common to all branches in the division. For customer satisfaction, the 1996 goal was to achieve a rating of at least 80.

Financial, strategy implementation, customer satisfaction, and control targets formed the quantitative basis for *ex post* performance evaluation. Each quarter, area managers received branch information with the actual numbers for each of these measures and a comparison with the quarterly objectives. This information, together with the subjective scores that the area manager gave for the People and Standards ratings, formed the basis for the quarterly and yearly evaluation of branch managers.

Year-end performance evaluation was determined jointly by a team led by Frits Seegers. The team comprised the area managers, including Lisa Johnson, and managers from human resources, quality, and finance. Frits believed that having a team jointly evaluate performance of every branch manager gave consistency to the process throughout the division. It was this team that was now meeting to decide James's performance evaluation for the year.

In addition to other motivational elements associated with the yearly evaluation, a branch manager's bonus was linked to his or her final Performance Scorecard rating. A "below par" rating did not carry any bonus. A "par" rating generated a bonus of up to 15% of the basic salary (for branch managers with a salary in the lower part of the salary bracket, the bonus could reach 20%). An "above par" rating could mean as much as 30% bonus.

Without "par" ratings in *all* the components of the Scorecard, a manager could not get an "above par" rating.

Performance of the Financial District Branch

Frits reviewed the 1996 performance evaluation forms for James McGaran. His financials were outstanding—20% above target. According to Lisa Johnson, James's branch "had generated the highest revenue and made the greatest margin contribution to the business of any branch in the system." His strategy implementation scores were in the "par" to "above par" range, although Lisa Johnson had given him an "above par" rating in three quarters. James had maintained an "above par" rating in the control scorecard and Lisa Johnson had rated him exceptionally where she had the discretion to do so.

However, customer satisfaction was "below par". A branch obtained a "par" rating if it scored 74 to 79. If customer satisfaction was above 80 or it had improved 6 points with no regression during 2 quarters and it was above the market average (77), then the branch got an "above par" rating.

Lisa and Frits were aware that a strict application of the new policies for performance evaluation meant that James could get at most a "par" evaluation for the year. But James' branch was the largest and toughest branch in the division. He had a demanding clientele and challenging competition. It was difficult to manage such a diverse set of indicators, and the customer satisfaction measure was sometimes hard to reconcile with demonstrated financial performance. James had discussed with Lisa his concerns regarding the adequacy of the survey. Customers rated not only their branch, but also other Citibank services such as ATM's that were out of the control of branch managers. Thus, it was possible that these centralized services were not providing adequate support to the sophisticated customers of James's branch.

Notwithstanding these concerns, James had worked hard to improve the customer satisfaction rating during the last quarter. He had made some changes in his staff to improve the score. One person in the branch was now dedicated to greeting the customer when arriving at the office and helping with any problems that may arise. He also held branch meetings and coached branch employees to focus their attention on improving customer satisfaction.

James gave a lot of importance to his ratings. It was a matter of pride to be "above par" and show that he was able to successfully run the hardest branch in the division. He had felt very disappointed when, in two quarters of the year, his rating had been only par. His branch was difficult and he was delivering the best financial performance in the division. He thought that his efforts deserved an above par rating, even if customer satisfaction was somewhat lagging.

Frits reviewed James's scorecards for each quarter of 1996 (**Exhibit 2** to **5**). His financials were exceptional, but only in the last quarter was he able to pull customer satisfaction to an acceptable level. If the performance evaluation team gave James an "above par" people could think that the division was not serious about its non-financial measures. James had been "below par" in customer satisfaction for all quarters of 1996 and, if this measure was truly important, he should not get an "above par" rating. On the other hand, he deserved the above par given his excellent performance in other dimensions. James was a reference point for a lot of other branch managers.

Frits held the summary scorecard in his hand (**Exhibit 1**) and turned to Lisa Johnson:

> "Lisa, I've read over your comments and reviewed James's quarterly scorecards. All that now remains is ticking off the six boxes on this summary form and deciding on an overall performance rating for James ... What do you recommend?"

Exhibit 1 James McGaran's year-end performance for 1996

	Below Par / Par / Above Par	YEAR-END PERFORMANCE ASSESSMENT
FINANCIAL — Total / Above plan Revenue $ 6 million $604,933 Expense $1.7 million $88,460 Margin $4.3 million $693,393		James had an exceptional year. The branch grew $56 million or 39% in footings, ranking #1 in the marketplace. Contribution margin was $4.3 million for the year, ranking the branch #1 in the marketplace. Expenses were $88.5 thousand better than plan for the year. Contribution margin improved by 48% from 4Q95 to 4Q96.
STRATEGY IMPLEMENTATION		The branch enjoyed strong growth in business, professional, and retail. Citigold began to pick up in the third and fourth quarter. The branch's new household acquisition of 21% was impressive. Annualized attrition was 12% in 1996. James grew balances in all business segments: retail balances improved $2.4 million, Citigold increased $18 million, and business and professional increased $34.8 million.
CUSTOMER SATISFACTION		Full-year service scores showed mixed results, 66 1Q, 63 2Q, 54 3Q, 72 4Q. James identified areas of opportunity and put corrective measures in place that allowed him to improve service scores substantially by year-end.
CONTROL Operating losses $81,960 Fraud losses $55,920		The branch received two "5" audit ratings in 1996. James is a very conscientious manager and works closely with his SCM to ensure operational compliance all times. Due to the sheer volume of transactions, the branch sustained substantial operating and fraud losses, over $137 thousand full-year. Some of these losses were from prior years, others were beyond branch control. Still, there is room for improvement in this area.
PEOPLE Performance Management Teamwork Training / Development Employee Satisfaction		James is an excellent people manager. His Viewpoint results were amongst the best in the Area. He is a team-builder in his branch and motivates his people to go above and beyond. James had minimal turnover in 1996. James is one of the most consistent managers in the Area. His daily meetings are well-planned and productive. He instills focus and discipline in his branch. James is viewed as a team-player in the Area. He is quick to volunteer to help his peers or participate on special projects. James has been working on his MBA and has nearly completed the comprehensive Credit training program.
STANDARDS Leadership Business Ethics / Integrity Customer Interaction / Focus Community Involvement Contribution to Overall Business		James has very high standards for himself and those in his employ. He is well respected for his strong leadership skills. He showed sincere concern for his customer service scores and did whatever was necessary to improve customer satisfaction. James and his team are very involved in the local community. James has taken an active role in developing a business network within the community. He also served as a board member on the American Heart Walk campaign. James's people are also involved in various community groups.
OVERALL EVALUATION		This has been an exceptional year for James. From a financial perspective, his branch was rated #1 in the marketplace. His willingness and ability to look outside the box to close a deal are admired and respected. He has done an excellent job refining his management style, becoming one of the most effective leaders and coaches in the marketplace. James is dedicated to the success of the business, as evidenced by his willingness to work weekends, holidays, and during his vacation to ensure customer satisfaction, operational control, and financial growth. James is an outstanding manager. Congratulations on a job well done!!

Signed by Area Manager: ______________________ Approved by Regional President: ______________________

Exhibit 2 James McGaran's Performance Scorecard for the first quarter of 1996

	Below Par	Par	Above Par	1996 RESULTS 1st quarter	2nd quarter	3rd quarter	4th quarter	1996 GOALS 1st quarter	2nd quarter	3rd quarter	4th quarter
FINANCIAL			✓								
Revenue			✓	1,250,094				1,134,276	1,206,442	1,325,692	1,416,242
Expense		✓		421,430				403,586	417,972	414,900	414,900
Margin			✓	828,664				730,690	788,470	910,792	1,001,342
STRATEGY IMPLEMENTATION		✓									
Total Households		✓		3,228							
New to bank households				257							
Lost to bank households				(93)							
Cross-sell, splits, mergers households				4							
Retail asset balances				$ 5,578							
Market share				1.8%							

	Below Par	Par	Above Par	Score / Goal	Comments
CUSTOMER SATISFACTION		✓		Score 66 Goal 80	The branch has shown significant and sustained improvement in customer satisfaction.
CONTROL			✓		
Audit			✓	Score 4 Goal 4	The branch demonstrates strong operational control.
Legal / Regulatory			✓		

	Below Par	Par	Above Par
PEOPLE			✓
Performance Management			✓
Teamwork			✓
Training / Development			✓
Self			✓
Other			✓
Employee Satisfaction			✓

James is a strong manager. He has inculcated a disciplined sales process and reinforces it with a daily focus on how the business, branch, and individuals are doing vs. goal.

James is currently working on his MBA degree.

James works closely with his staff, coordinating the necessary training programs either in branch or in the class-room. His daily meeting and coaching sessions have allowed him to increase the knowledge and professionalism of his people.

	Below Par	Par	Above Par
STANDARDS			✓
Leadership			✓
Business Ethics / Integrity			✓
Customer Interaction / Focus			✓
Community Involvement			✓
Contribution to Overall Business			✓

James provides clear and concise direction in his branch. He acts professionally, earning the respect of his staff, colleagues, and customers. James has built a cohesive team and leads by example.
James consistently upholds all bank standards and ensures appropriateness of action for himself and his staff.
Excellent progress in customer interaction.
James proactively develops and implements effective programs to enhance Citibank's image as socially responsible. He and his staff are involved in a number of community groups in Los Angeles.
James makes significant contribution to the business. The branch is currently the highest revenue and margin producer in the market place. James and his team grew revenue by $142.2 million or 16%.

	Below Par	Par	Above Par
OVERALL EVALUATION			✓

James takes complete ownership of his branch and leverages internal and external relationships to grow the business and solve problems. He has demonstrated his ability to consistently outperform the branch's aggressive financial goals.

Signed by Area Manager: ______________

Exhibit 3 James McGaran's Performance Scorecard for the second quarter of 1996

	Below Par	Par	Above Par	1996 RESULTS				1996 GOALS			
				1st quarter	2nd quarter	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter	4th quarter
FINANCIAL			✓								
Revenue				1,254,876	1,486,172			1,141,612	1,213,744	1,332,865	1,423,454
Expense				421,430	378,959			403,586	436,276	436,806	437,282
Margin				833,446	1,107,213			738,026	777,468	896,059	986,172
STRATEGY IMPLEMENTATION			✓								
Total Households				3,403	3,438						
New to bank households				257	162						
Lost to bank households				(93)	(119)						
Cross-sell, splits, mergers households				4	(7)						
Retail asset balances				$ 5,578	$ 5,402						
Market share				1.8%	1.8%						
CUSTOMER SATISFACTION	✓			Score 63 Goal 80	The score is down 3 points. James and his team need to work on customer satisfaction.						
CONTROL			✓	Score 5 Goal 5	An exceptional score given the size and complexity of the branch.						
Audit											
Legal / Regulatory											
PEOPLE			✓	James fosters a strong sense of teamwork, as evidenced by his Viewpoint results and employee satisfaction scores. James maintains very high development standards for himself and his staff. He is currently working on his MBA degree and should graduate in 1997. James also actively promotes cross-training and self-development.							
Performance Management											
Teamwork											
Training / Development											
Self											
Other											
Employee Satisfaction											
STANDARDS			✓	James is recognized throughout the business as one of California's finest managers. He has demonstrated strong leadership skills and a keen understanding of the business. The branch, under James's leadership, has made a major contribution to the marketplace. The branch's margin contribution of $1,108M, exceeds the next closest branch by 53%.							
Leadership											
Business Ethics / Integrity											
Customer Interaction / Focus											
Community Involvement											
Contribution to Overall Business											
OVERALL EVALUATION		✓		James had another exceptional quarter. The branch exceeded its margin goal by 22%. Total margin contribution improved 33%, total footings increased by 9.4%, and revenue increased 18.4%. Congratulations on another outstanding quarter.							

Signed by Area Manager: Lisa Johnson

Exhibit 4 James McGaran's Performance Scorecard for the third quarter of 1996

	Below Par	Par	Above Par	1996 RESULTS 1st quarter	1996 RESULTS 2nd quarter	1996 RESULTS 3rd quarter	1996 RESULTS 4th quarter	1996 GOALS 1st quarter	1996 GOALS 2nd quarter	1996 GOALS 3rd quarter	1996 GOALS 4th quarter
FINANCIAL			✓								
Revenue			✓	1,254,876	1,486,172	1,593,690		1,141,612	1,213,744	1,429,974	1,423,454
Expense			✓	421,430	395,216	378,458		403,586	436,276	445,688	437,282
Margin			✓	833,446	1,090,956	1,215,232		738,026	777,468	984,286	986,172
STRATEGY IMPLEMENTATION			✓								
Total Households			✓	3,409	3,445	3,511					
New to bank households		✓		257	162	152					
Lost to bank households		✓		(93)	(119)	(100)					
Cross-sell, splits, mergers households		✓		4	(7)	13					
Retail asset balances		✓		$ 5,578	$ 5,402	$ 5,437					
Market share			✓	1.8%	1.8%	1.8%					

	Below Par	Par	Above Par	Comments
CUSTOMER SATISFACTION	✓			Score 54 Goal 80 — Service scores continued to deteriorate in the 3rd. quarter. The branch ran short of one teller and desperately needs another two CBCs to offload the day time traffic in the branch.
CONTROL				Not reviewed this quarter.
Audit				
Legal / Regulatory				
PEOPLE			✓	
Performance Management			✓	James has a very focused and disciplined sales process in his branch. His daily sales meetings have become the "model" for the Area.
Teamwork			✓	
Training / Development			✓	
Self			✓	James is currently working on his MBA degree and participating in the Commercial program.
Other			✓	
Employee Satisfaction			✓	Employee satisfaction is high in the branch, as evidenced by James's positive Viewpoint results.
STANDARDS			✓	James is highly respected in the Area as a seasoned manager and leader.
Leadership			✓	
Business Ethics / Integrity			✓	
Customer Interaction / Focus		✓		
Community Involvement			✓	James and his team are very involved in the local community.
Contribution to Overall Business			✓	James makes a tremendous contribution to the Area and the business. He has a "can do" attitude and often finds ways to make deals happen despite systems and back-office constraints.
OVERALL EVALUATION		✓		James had another exceptional quarter. Financials improved in all aspects. Expenses were below plan and his contribution margin is the highest in the marketplace.

Signed by Area Manager: ______________________

Exhibit 5 James McGaran's Performance Scorecard for the fourth quarter of 1996

	Below Par	Par	Above Par	1996 RESULTS 1st quarter	2nd quarter	3rd quarter	4th quarter	1996 GOALS 1st quarter	2nd quarter	3rd quarter	4th quarter
FINANCIAL			✓								
Revenue			✓	1,254,876	1,486,172	1,593,690	1,636,056	1,141,612	1,213,744	1,429,974	1,580,534
Expense		✓		421,430	395,216	378,458	456,061	403,586	436,276	445,688	454,076
Margin			✓	833,446	1,090,956	1,215,232	1,179,995	738,026	777,468	984,286	1,126,458
STRATEGY IMPLEMENTATION			✓								
Total Households		✓		3,409	3,445	3,511	3,503				
New to bank households		✓		257	162	152	102				
Lost to bank households		✓		(93)	(119)	(107)	(128)				
Cross-sell, splits, mergers households			✓	4	(7)	20	18				
Retail asset balances			✓	$ 5,578	$ 5,402	$ 5,437	$ 5,510				
Market share			✓	1.8%	1.8%	1.8%	1.8%				

	Below Par	Par	Above Par	Score	Comments
CUSTOMER SATISFACTION		✓		Score 72 Goal 80	Congratulations to James and his team for their improvement in service results.
CONTROL			✓	Score 5 Goal 5	James maintains strong operational control in his branch.
Audit			✓		
Legal / Regulatory			✓		

	Below Par	Par	Above Par
PEOPLE			✓
Performance Management			✓
Teamwork			✓
Training / Development			✓
Self			✓
Other			✓
Employee Satisfaction			✓

James is an exceptional performance manager. He communicates clear and concise expectations and manages his people to their best potential.
James is a consummate team player and fosters the same behavior in his branch.
Self and employee development are a priority to James. He is currently working on his MBA degree and is attending comprehensive Credit training program.
James encourages his staff to develop themselves. He also looks for opportunities for them to attend Area or CitiSource training programs.
James enjoys a high level of employee satisfaction, as evidence by his Viewpoint results and low employee turnover.

	Below Par	Par	Above Par
STANDARDS			✓
Leadership			✓
Business Ethics / Integrity			✓
Customer Interaction / Focus			✓
Community Involvement			✓
Contribution to Overall Business			✓

James is highly regarded as an effective leader and coach. His daily sales meetings have become the model for the other branches in the Area.

It's been a difficult year meeting customer expectations in the branch but James and his team have done an outstanding job managing the challenge.
James is very involved in the local community and proactively looks for opportunities for himself and his staff to create an awareness with local groups and establish Citibank and a model corporate citizen.

	Below Par	Par	Above Par
OVERALL EVALUATION			✓

James has done an exceptional job. The branch was rated #1 in the marketplace. It generates the highest revenue and makes the greatest margin to the business. They have done all that while maintaining a 5 rated audits. Exceptional quarter and outstanding year!!

Signed by Area Manager: ____________________