

Activity-Based Costing [FN](#)

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Until recently, most of the literature in *cost management* systems has been articulated for manufacturing companies. Service companies, however, have the same fundamental managerial issues as manufacturing companies. Both have high degrees of committed resources and therefore need activity-based costing (ABC) to link the costs of the resources they supply to the revenues earned by the individual products and customers serviced by these resources. By understanding this linkage, and the interplay among pricing, features, customer usage, and process improvement a company can make good decisions about the customer segments it wishes to serve, the products it will offer to customers in those segments, the method of delivering the products to those customers, and, ultimately, the quantity and mix of resources it will supply to enable all this to happen. Because virtually all their operating expenses are fixed once resource supply has been committed, service organizations need the costing insights from ABC even more than manufacturing organizations.

For short-term (daily, weekly, monthly) monitoring and control, service companies need an operational control system that provides feedback on expenses incurred in each of its organizational units, as well as other measures of performance, such as quality and response times. Some service organizations have highly detailed systems for measuring expenses, line item by line item, in every one of thousands of different responsibility and cost centers. But even with elaborate budgeting and expense reporting systems, many service organizations find it difficult to measure the output and quality from their decentralized business units. Consequently, attempts at continuous improvement, total quality management, and cycle time management are hindered because of the lack of adequate output, quality, and throughput time measurements. Service companies, like manufacturing companies, need explicit management accounting systems to promote organizational learning and improvement.

A4.01 COST MANAGEMENT SYSTEMS: AN INTRODUCTION

Companies need cost systems to perform three primary functions:

1. Prepare financial reporting statements
2. Estimate costs of activities, products, services, and customers
3. Provide economic feedback to employees and operators about process efficiency

The first of these functions is driven by the needs of constituencies *external* to the organization: investors, creditors, regulators, and tax authorities. The procedures for performing this external, financial reporting function are governed by a myriad of rules and regulations established by tax authorities, governmental agencies, private standard-setting bodies, and public accounting societies. The second and third functions arise from the needs of managers *internal* to the organization to understand and improve the economics of their operations. Managers need

accurate and timely cost information to make both strategic decisions and operational improvements that will enhance their organizational economics.

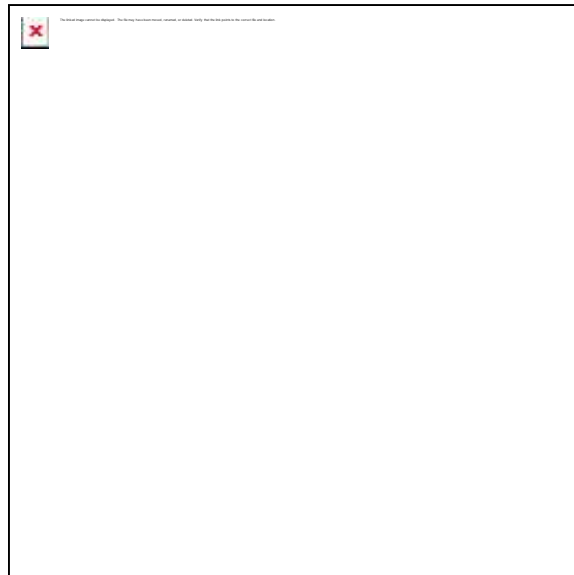
In the past, many companies have attempted to meet these three different functions with a single costing system. In an environment of limited product and process variety, and where excellence in operating processes was not critical for success, a single costing system might have sufficed. This is no longer possible. As competition increased during the latter half of the twentieth century, managers needed much more accurate information about the costs of their processes, products, and customers than they could obtain from their system used for external financial reporting. Activity-based cost (ABC) systems emerged in the mid-1980s to meet managers' desires for accurate information about the cost of resource demands by individual products, services, customers and channels. ABC systems enabled indirect and support expenses to be driven, first to activities and processes, and then to products, services, and customers. The systems gave managers a clearer picture of the economics of their operations.

[1] Activity-Based Management

The clearer picture from ABC systems led naturally to *activity-based management* (ABM): the entire set of actions that can be taken, on a better informed basis, with activity-based cost information. ABM enables the organization to accomplish its outcomes with fewer demands on organizational resources; that is, the organization achieves the same outcomes (e.g., revenues) at a lower total cost (lower spending on organizational resources). ABM accomplishes its objective through two complementary applications, which we call *operational* and *strategic* ABM (see Figure A4-1).

Figure A4-1.

Activity-Based Management: Strategic Decisions and Operational Improvements



Operational ABM—doing things right—works to enhance efficiency, lower costs, and enhance asset utilization. Operational ABM can increase the capacity of resources (equipment and people) by reducing machine downtime, improving or eliminating defective activities and processes, and increasing the efficiency of the resources. It reviews the demand for organizational activities and attempts to meet this demand with fewer organizational resources. In other words, operational ABM assumes that revenues are held constant, and attempts to either increase capacity or lower the spending (i.e., reduce the cost driver rates of activities), so that fewer physical, human, and working capital resources are required to generate revenues. The benefits from operational ABM can be measured by reduced costs, higher revenues (through better resource utilization), and cost avoidance (because the expanded capacity of existing resources obviated the need for additional investments in capital and people).

Strategic ABM—doing the right things—attempts to alter the demand for activities to increase profitability while assuming, as a first approximation, that activity efficiency remains constant. For example, the organization may be operating at a point where the revenues being earned from a particular product, service, or customer are less than the cost of generating those revenues. Strategic ABM encompasses shifting the mix of demand for activities away from such unprofitable applications, by reducing the cost driver quantities demanded by unprofitable activities. The ABC model signals where individual products, services, and customers appear to be highly profitable so that marketing and sales experts can explore whether demand for those highly profitable products, services, and customers can be expanded to generate incremental revenues that exceed their incremental costs. They then take actions to shift the activity mix toward more profitable uses. Managers also use ABC information to choose suppliers who are low-cost not just low-price.

Obviously, operational and strategic decisions are not mutually exclusive. Organizations will get the greatest impact when they both reduce the resources required to perform a given quantity of activities and, simultaneously, shift the activity mix to more profitable processes, products, services, and customers. But ABC systems, by themselves, do not solve all the limitations of traditional costing systems.

[2] Operational Control Systems

Even with the more accurate cost information provided by innovative ABC systems, many companies continued to use their standard costing systems as the primary feedback mechanism to responsibility center supervisors and employees. Management accountants acted as score-keepers. They preferred to be neutral observers, sitting on the sidelines, distant from the action, and often not even observing the processes that produced and delivered products and services. Instead, the management accountants issued periodic reports, derived from their financial accounting system, that reconciled actual with budgeted (or standard) expenses. The accounting and finance staff issued these periodic performance reports according to the monthly financial reporting cycle, so they appeared days or weeks after the actual events they reported on. And the reports were filled with cost accounting jargon—allocations and variances calculated many different ways—that were incomprehensible to the people performing work every day.

Apart from the delays and difficulty in interpreting these reports, their philosophic underpinnings were inconsistent with the demands of the new operating environment. These traditional cost controlling systems, with their standards and variance reporting, emphasized stability, control, and efficiency of isolated machines, workers, and departments. Such an emphasis is not responsive to today's competitive world that stresses the continuous and discontinuous (i.e., reengineering) improvement and the cross-functional integration required to provide quick response, high-quality processes geared to customer demands.

Thus, both newly designed activity-based costing systems and new systems for operational control and learning are needed for the critical management purposes. These new systems supplement the traditional standard costing systems that continue to be used to prepare periodic financial reports.

A4.02 APPLYING ACTIVITY BASED COSTING TO SERVICE COMPANIES

Why did innovative cost management approaches, such as activity-based costing, originate in manufacturing companies and not in service organizations? In practice, the steps for constructing a cost management model, especially ABC, are virtually identical for both types of companies. This should not be surprising because even in manufacturing companies, the ABC system focuses on the “service” component of the factory and company as a whole. As a general rule, the ABC system in manufacturing companies retains the direct labor and direct materials elements of the company's product costs as traceable in the manufacturing cost system. The changes from introducing ABC arise when factory indirect and support expenses are analyzed. These expenses represent the cost of providing *services* to manufacturing operations; that is, the activities are ordering, scheduling, moving, setting up, designing, inspecting, training, and supporting—all service activities that enable products to be produced but that are not directly involved in actual production.

When the ABC model is extended outside the factory, to include activities performed by marketing, sales, logistics, and corporate staff, the service orientation of ABC becomes even more obvious. In effect, ABC, from its origins, has been service-oriented rather than production-oriented. Thus, its extension to organizations that do no production, and instead provide service alone, does not require any new principles, only appropriate adaptations.

A service company with a traditional cost management accounting system may know how much is being spent in each individual cost and responsibility center by detailed type of expenditure. But such information communicates nothing about how much it costs to process a single customer transaction that benefits from the resources provided in dozens of different organizational units. Take a simple example of a telecommunications company responding to a customer request for a new connection. The process involves people from many different departments (customer call desk, credit check, planning, dispatching, engineering, billing, and customer service, plus several others). The cost of performing this basic service differs dramatically if the customer changes the order specification, complains about the outcome, fails the credit check, or requires additions to capacity. One cannot view this process from the perspective of cost control in responsibility centers. This company needs an ABC system to measure the consumption of resources in diverse responsibility centers by individual products

and customers, and by the activities and business processes that deliver the products to customers. Only the end-to-end process look from an ABC perspective reveals the cost of performing basic services for individual customers.

So why have service companies lagged behind manufacturing companies in applying innovative cost management systems? One explanation is that manufacturing companies already had product costing systems to satisfy the inventory valuation requirements of financial reporting. Therefore, when the costing systems used for financial reporting became disconnected with changes in products, customers, and business processes, managers could easily see the problems from making decisions with the distorted signals from these systems.

Most service companies, in contrast, had no statutory requirement to measure the costs of their products or customers. They have operated for decades without cost systems. They did not, of course, operate without financial systems. Service companies managed operations through budgetary control of responsibility centers. The companies were organized by functional departments, budgets were established for each department or responsibility center, and financial performance was measured and managed by comparing actual with budgeted results. In effect, service companies had their own version of operational control systems, though without much use of flexible budgeting since, as we will discuss in further detail, almost all of a service company's costs arise from resources committed in advance of use; that is, they are "fixed" costs in the short run. Thus, even though service companies were frequently as complex and diversified as manufacturing companies, managers knew neither the costs of the services they produced and delivered, nor the cost of serving their different types of customers.

For example, the manager of a supermarket may know how much is spent, by type of expenditure, at each retail store and at each warehouse. But the manager would not know the cost of receiving a case of canned vegetables from a supplier, storing it in a distribution center, transporting it to the retail outlet, and moving it to a shelf for the consumer to buy. Similarly, a bank president would know revenues and expenses by line item (interest revenue, fee income, retail bank expenses, data processing costs), but would not know the cost of different types of checking accounts or the costs to serve individual customers.

[1] Changing Competitive Environment

This lack of accurate information about the products and customers was not a concern for many decades because most service companies operated in benign, noncompetitive markets. Many service companies have, until recently, been highly regulated. In Canada and Europe, many service organizations, such as railroads, airlines, and telecommunications, were not even private companies. Rather they were government-owned and operated monopolies. In these noncompetitive environments, managers of service companies were not under great pressure to lower costs, improve the quality and efficiency of operations, introduce new products that made profits, or eliminate products and services that were incurring losses. Regulators set prices to cover the operating costs of inefficient companies. Laws and regulations prevented more efficient competitors from entering the markets in which regulated or government-owned service companies operated; and taxpayers subsidized any losses in government-operated companies.

Lacking strong competitive pressures, managers of service organizations had little demand for cost information about products, customers, and processes. Consequently, the financial systems in most service organizations were simple. They allowed managers to budget expenses by operating department, and to measure and monitor actual spending against these functional departmental budgets.

During the last two decades of the twentieth century, however, the competitive environment for most service companies has become as challenging and demanding as for manufacturing companies. The deregulation movement since the 1970s has completely changed the ground rules under which many service companies operate. Pricing, product mix, and geographic and competitive restrictions have been virtually eliminated in the financial services industry. Transportation companies can now enter and leave markets and determine the prices at which they offer services to customers. Telecommunications companies now compete aggressively on price, quality, and service. Health care reimbursement is shifting away from pure cost recovery schemes. Utility companies are crossing previously impermeable borders to compete across geographic regions. Even government monopolies, such as the postal service, are today experiencing competition from private companies. For example, Federal Express and UPS offer overnight delivery of letters and packages; telecommunication companies allow documents to be sent via facsimile transmission; and the Internet and World Wide Web permit the transmission of mail, messages, and documents on international electronic networks. And the trend to privatization that is now sweeping through the world completely changes the rules of the game for former government-operated companies. They must transform themselves into private, competitive companies. Even local retail outlets, historically sheltered from national or global competition, are facing vigorous competition from new entrants of efficient mass merchandisers, whether of food, toys, office supplies, home furnishings, or pet supplies.

Thus, managers of service companies now require information to improve the quality, timeliness, and efficiency of the activities they perform, and to understand accurately the cost and profitability of their individual products, services, and customers.

[2] Service Companies: A Complex Environment for Costing Products and Services

Service companies in general are ideal candidates for activity-based costing, even more than manufacturing companies. First, virtually all their costs are indirect and appear to be “fixed.” Manufacturing companies could at least trace important components of costs, such as direct materials and direct labor, to individual products. Service companies have minimal to no direct materials and much of their personnel provide indirect, not direct, support to products and customers. Probably because of their insulation from strong competitive forces, most service companies did not deploy large numbers of industrial engineers to study and standardize direct labor operations for those employees who did provide direct service for products and customers. Consequently, service companies did not have a platform established for measurement of direct costs on which to erect systems for assigning indirect costs to individual products and customers.

The large component of apparently “fixed” costs in service organizations arises because, unlike manufacturing companies, they have virtually no material costs, the prime source of short-term variable costs. Service companies must supply virtually all their resources in advance. The

resources provide the capacity to perform work for customers during each period. Fluctuations during the period in the demand by individual products and customers for the activities performed by these resources do not influence short-term spending to supply the resources.

One bank executive asked, in the proposal stage of an ABC project: *Why do we need to develop an ABC system for assigning costs to products and customers? Shouldn't we be making decisions based on marginal costs?*

The ABC consultant replied: *What do you think your marginal costs are for handling an extra transaction or an extra customer?*

The answer, of course, is that the marginal cost (conventionally defined as the increase in spending resulting from an incremental transaction or customer) is essentially zero. For example, a transaction at a bank's ATM machine requires an additional consumption of a small piece of paper to print the receipt, but no additional outlay. For a bank to add an additional customer may require a monthly statement to be mailed, involving the cost of the paper, an envelope, and a stamp, but little more. Carrying an extra passenger on an airplane requires an extra can of soda pop and bag of peanuts (for U.S. flights these days), and a very minor increase in fuel consumption, but nothing else. Treating one more patient in a hospital or health care facility may involve an incremental expenditure on pharmaceuticals and bandages. But for a telecommunications company, handling one more phone call from a customer, or one more data transfer, involves no incremental spending. Therefore, if service companies were to make decisions about products and customers based on short-term marginal costs, they would provide a full range of all products and services to all customers at prices that could range down to zero. But then, of course, the companies would get limited to no recovery of the costs of all the ("fixed") resources they supplied that enabled the service to be delivered to the customer. Only by fully incorporating the capacity-based costing ideas will service companies be able to measure and manage their cost structure, service offerings, and customer relationships.

For service companies, almost a complete separation exists between decisions to incur costs, and the decisions by customers that generate revenues. Decisions to incur, or subtract, costs involve adding or contracting the supply of resources to provide services, such as the following:

- Adding a new city to an airline's route schedule
- Building another rail line or acquiring additional locomotives and freight cars by a railroad
- Hiring additional physicians or adding operating room capacity for a hospital
- Expanding the network for a telecommunications company
- Building additional branch or retail outlets for a bank or retailer

On the other hand, decisions by consumers that generate revenues include other issues, such as:

- The size of their monthly balances in checking accounts
- Length of long distance phone calls placed
- Number of passenger miles flown
- Number and type of health care procedures requested

In manufacturing companies, the costs associated with meeting customer demands and the revenues associated with selling products to customers are linked by the direct costs of materials in a product and the direct labor and energy costs to produce the product. Service companies have no such direct connection. All linkages between the costs of resources supplied and their use by individual products and customers must be inferred and estimated, a process identical to how ABC links indirect manufacturing resources to products. Also, a revenue-generating event—taking an airline flight, shipping a container by rail, obtaining treatment for a disease or injury, completing a long-distance phone call, receiving a kilowatt of energy, and using a checking account for a month—makes demands on and requires the service output from many different organizational units in a service company.

A4.03 DEMAND FOR ACTIVITY-BASED COSTING BY SERVICE COMPANIES

Why do service companies find it useful to understand the cost of activities, business processes, products and customers? The demand for such cost information arises from three broad classes of managerial decisions:

1. Managing products and customers
2. Configuring the customer service delivery chain
3. Budgeting the organization's supply of resources

We will discuss each of these applications in turn.

[1] Managing Products and Customers

[a] Managing Products

Service companies typically offer a highly diverse set of offerings. Retail banks have many different types of checking and savings accounts, as well as many types of consumer and commercial loans; telecommunications companies offer many calling plans and provide local and long-distance service, plus voice, data, and video transmission capabilities; transportation companies offer service between a large number of origins and destinations (each of the enormous number of combinations between every origin and destination pair can be thought of as a unique product); health care facilities obviously offer treatment for a wide variety of ailments and conditions; and retail establishments can stock tens of thousands of different items (SKUs or stockkeeping units). Each product, with its unique characteristics, makes different demands on the organization's resources. Service organizations must continually assess the economics of their product line variety, making decisions on pricing, quality, responsiveness, introduction and discontinuance of individual products. The cost and profitability of individual products offer vital input into such decisions.

For example, a telecommunications company can offer point-to-point capacity either with a dedicated private circuit or by a secure ISDN line. The private circuit is expensive to install and maintain, requiring a dedicated sales and engineering force and specialized maintenance. An ISDN line could provide similar quality of service but at much lower cost since ISDN lines

already exist in much of the network and are serviced and maintained by standard engineering and maintenance teams. By understanding the significant differences in total cost structure between private dedicated lines and shared ISDN lines, the telecommunications company could price its services so that customer with high demand for point-to-point traffic could be satisfied by existing, and much lower cost, ISDN capacity.

Health care represents another service industry where insights from ABC analysis can have a profound impact on understanding the economics of alternative products. Current practices in health care are to estimate procedure costs based on the charges for these procedures (RCC—ratio of costs to charges). This is a bizarre way for determining the costs of resources being used for diverse procedures performed on diverse patients in diverse facilities. In one application, the cost of many activities required for complex surgical procedures were independent of the complexity of the procedure. That is, the cost of preoperating procedures of scheduling and preparing the operating room, patient, surgeon and support staff were independent of the particular procedure performed. Also, many of the postsurgical activities were the same, regardless of the procedure performed. Consequently, there was far less dispersion in the actual cost of performing surgical procedures than had been previously believed, based on the traditional RCC system used in the hospital.

As another simple example, an ABC study revealed that performing kidney dialysis at home versus at the health care institution was far less costly than had been estimated by the hospital's cost system, which had been developed based on regulatory costing principles.¹ This finding helped the facility's managers make much better informed decisions to customize the appropriate venue for kidney dialysis for individual patients.

The revelation of substantial unused capacity in health care facilities will have dramatic and surprising implications to where patients can be treated at lowest cost. Treating patients in existing facilities may be much lower cost than had previously been believed, once the cost of unused capacity is separated from the cost of used capacity.

Activity-based costing can also produce benefits for government agencies.² The U.S. Veterans Affairs Department has identified the cost of the 10 activities performed to process death benefits and uses this information to monitor and improve the underlying cost structure for performing this function. The U.S. Immigration and Naturalization Service (INS) uses its ABC cost information to set fees for all its outputs, including administering citizenship exams and issuing permanent work permits (green cards). The INS also now estimates the fees to charge for new services, based on the ABC cost breakdowns for performing similar or related services.³

The U.S. Internal Revenue Service has conducted an activity-based analysis of its operations. Previously, it, like all service companies, had budgeted in exquisite detail, line-item expenses for salaries and benefits, facilities, occupancy, computing, travel, and telecommunications. But it had no idea how much it cost to conduct various types of audits (individual accounts, corporate accounts, partnerships, tax shelters, etc.). Nor could expenses be aligned with individual activities and processes performed by operating units to process returns, receipts, and refund disbursements. Consequently, the organization had no idea about inefficiencies and non-value-

added activities being performed, and had no guidance for aligning its resources to alternative uses.

The ABC models highlighted major opportunities for process improvements. They revealed that the cost of handling electronically filed returns were far lower than for manual returns, an insight that stimulated the agency to encourage taxpayers to shift their payments to electronic filing. The alignment of returns (revenues generated from audit activities) with the cost of alternative types of audits also permitted district managers to make more cost-effective assignments of their audit staff to the different programs. Some programs yielded less than \$1 in returns for each \$1 spent in audit activity, while others generated more than \$10 in returns per audit dollar spent.⁴

Perhaps the most innovative application of ABC to government agencies occurs in the privatization decisions occurring in countries throughout the world. A good example is the City of Indianapolis where Mayor Stephen Goldsmith was elected on a program of privatization.⁵ The mayor wanted to make government smaller, to make it more responsive, and to make its managers think about value—the cost and quality of services delivered to its customers, the citizens. After nearly four years of using operational and strategic ABM to make city services more competitive, the City of Indianapolis had become remarkably more cost effective. Total city employment had dropped from 4,675 persons to 3,650, with the decrease almost completely accomplished by a 40 percent reduction in non-public safety employees, from 2,425 to 1,484. City planners identified the cost savings already achieved from the competition at nearly \$80 million, and identified an additional \$150 million in contractually committed savings to be realized over the next few years. With the introduction of ABC-based competition, city budgets declined for four consecutive years, and the 1996 budget was about \$90 million less than if the previous 8 percent per year trend in increased city spending been allowed to continue for another four years. Even better, the cost savings were accompanied by improvements in service output.⁶

[b] Managing Customers

Beyond product-related decisions, service companies must be intensely focused on customer economics, to a far greater degree than manufacturing companies. Consider a manufacturing company producing a standard product, let's call it a widget. Manufacturers can calculate the cost of producing the widget without regard to how their customers use the widget; the manufacturing costs are “customer independent.” Only the costs of marketing, selling, order handling, delivery, and service of the widget might be customer specific. For service companies, in contrast, even the basic operating costs of a standard product are determined by customer behavior.

Take the example of a standard (vanilla) product like a checking account. It is relatively straightforward—using ABC methods—to calculate all the costs associated with such a checking account. And the revenues, including interest earned on monthly balances and fees charged to customers for services, are also simple to attribute to this product. The analysis will reveal whether such a product is profitable or unprofitable. But this narrow view of the product will hide the enormous variation in profitability of this product across customers.

One customer may maintain a high cash balance in his checking account and make very few deposits or withdrawals. Such a customer generates high revenues and imposes few demands on

the bank's resources. A second customer may manage her checking account balance very closely, keeping only the minimum amount on hand, and use her account heavily by making many withdrawals and deposits. Such a customer's checking account may be highly unprofitable under current pricing arrangements. Service companies need to identify the differential profitability of individual customers, even those using standard products. The variation in demand for organizational resources is much more customer-driven in service organizations than in manufacturing organizations. The service company still determines and controls the *efficiency* of its internal activities, but the customer almost completely determines the *quantity* of demands for these operating activities.

However, a customer may not just have a single relationship with the bank. In addition to the standard checking account, the customer may have a savings account, a credit card, a mortgage, and a personal loan. Therefore, before taking drastic action with a customer with an unprofitable checking account, the bank's managers should understand all the relationships between the bank and the customer, and act based on total relationship profitability, not just the profitability with a single product. On the commercial side, a bank may break even or lose money (after an appropriate risk-adjusted cost of capital is applied) on a corporate loan, but because the loan also serves to establish a relationship between the bank and the corporation, the bank may make enough profit on trust services, corporate money management, and merchant banking services that the total relationship is highly profitable. On the other hand, a marginal borrower who uses no other commercial or merchant banking services is a prime candidate for repricing, aggressive marketing activities, or deletion (if all other attempts to generate a profitable relationship fail).

Other customers may appear unprofitable because they have been recently acquired. Many service companies invest considerable resources in marketing campaigns to attract new customers. Because of the high cost of acquiring new customers, and the time required to establish a broad and deep relationship (such as across multiple product offerings), new customers may appear to be unprofitable. Service companies need to distinguish the economics of newly acquired customers from those who have been customers for many years. Thus, in addition to recognizing cross-sectional variation of demands by customers, they must also forecast the longitudinal variation of customers over time to obtain total life-cycle profitability. Activity-based cost systems will provide service companies with the fine granularity of detail required for intelligent management of customers, individually and over time.⁷

As another example, customers of a telecommunications company can order a basic service unit in several different ways—through a phone call, a letter, or appearing in a local retail outlet. The customer may order two phone lines at once or just one; engineers may have to appear to install the new line, or perhaps just make a change in the local switching center. The customer may make only one request or several, and can pay either by direct debit, by a mailed check, or in person. The cost of each option is quite different. Therefore, measuring cost and profitability at the basic product level (cost of a connected phone line) is virtually meaningless. Measuring revenues and costs at the customer level provides the company with far more relevant and useful information.

Companies may find it difficult to target their offerings and modify the behavior at the individual customer level. Many service companies have millions or tens of millions of customers, and

therefore must group customers into manageable market segments. Companies may have as few as 3 to 5 segments or, with sophisticated databases and consumer information, up to 100 to 200 segments. Rather than report and manage profitability at the individual customer level, service companies may prefer to have their ABC systems calculate cost and profitability information at the segment level. As companies understand the characteristics and the preferences of these segments, they can decide which segments will be most profitable to target and retain, and which should be de-emphasized. It may be impossible to serve profitably all customer segments. Companies, knowing their internal capabilities (or core competencies), can select the value propositions they wish to deliver to targeted segments that enable them to attract significant business from customers in these segments and also be highly profitable in all targeted segments. Unprofitable customers in untargeted segments are prime candidates to be “de-marketed.” The ABC system gives executives the information and confidence they need to follow a profitable segmentation strategy. As one bank CEO explained his motivation for developing an ABC system: *We were prepared to make bold, innovative decisions to enhance our profitability. But if you are going to be bold, you had better be sure your facts are correct.*⁸

[2] Configuring the Customer Service Delivery Chain

If service companies understand the preferences of customers in different segments, they can tailor their service offering and the method of delivery to satisfy these diverse preferences. One telecommunications company conducted a needs-based market segmentation study to identify the different needs and expectations of its more than 100,000 business customers. The project team conducted a survey on a representative sample of customers and grouped respondents into segments based on their similarity of scores among several factors, representing different service demands, and a number of independent attributes. Six segments emerged:

1. Service-oriented performers
2. Growth/cost-conscious customers
3. High public contact users
4. Profit-focused customers
5. Data trackers
6. Status quo keepers

The company realized, however, that the needs-based segment analysis provided only one important part of the economics of customer relationships. It also needed to understand its current costs of delivering products, services, and customer support if it were to develop efficient marketing and delivery channels to its targeted and non-targeted business segments. For this it turned to activity-based costing.

With the ABC information, the project team analyzed the attractiveness of the six business segments, and of the opportunity to reengineer business processes to improve performance on business processes valued by the business segments. Based on this analysis, the project team selected three of the six segments to be targeted for aggressive business development. For each targeted segment, the project team identified the value proposition—the products, services, relationship, and delivery mechanisms—that it would offer to customers in the segment. For example, one customized value proposition consisted of providing dedicated marketing and sales

force resources to individual customers, as well as compensation policies that encouraged the sales representatives to develop strong relationships with these targeted customers. Another value proposition included offering stable, low-cost, and highly reliable standard services.

Previously the telecommunications company provided a full range of products and services to all business customers. Now it could see large variations in the needs and willingness to pay among its more than 100,000 customers. By targeting the needs of specific, attractive segments, the company could focus its limited marketing, product and service development, and customer support resources to capture the business from targeted segments, while still offering standard products, services, and support to its non-targeted customer base.

Because service organizations are so close to their customers, any decisions made about product offerings, features, price, and delivery must involve an interplay between customer preferences (such as that derived from the needs-based marketing study) and the cost of satisfying those preferences. Service companies will make the best decisions when they can combine their ABC analysis (the supply curve) with excellent information about the attributes and features valued by customers in different market segments (the demand curve). In this way, companies can select the segments they wish to target for growth and profitability, and customize their service offerings to these different segments so that each targeted segment is individually profitable.

[3] Budgeting the Organization's Resources

Finally, an accurate ABC model, linking organizational spending to supply resource capabilities to the activities performed and then to the demands by individual products or customers will facilitate decisions on the appropriate supply of resources. Service companies typically budget and manage their costs by responsibility centers. Without an ABC model, service company managers have no way of linking budgeting decisions that authorize the supply of resources for individual responsibility centers to the demands, from products and customers, for the activities and services provided by these responsibility centers. They must set budgets in an annual negotiations process between responsibility center heads and the senior executive team.

ABC information should be used actively and dynamically in the organization's budgeting process. Activity-based costing gives organizations the opportunity to move from static to dynamic budgeting. Managers will be able to authorize the supply of resources in forthcoming periods, not based on historical spending patterns, but based on the anticipated demands for the activities that are expected to be actually performed by the resources.⁹

When activity-based costing is used pro-actively in the budgeting process, it blows away conventional thinking about fixed and variable costs. The time when the spending on most resources is variable occurs during the budgeting process. Once, during the budgeting process, the spending is authorized, then indeed most organizational expenses will appear to be “fixed.” But activity-based costing gives managers the information they need to make almost all organizational expenses variable; they can acquire, supply, and maintain only the resources needed to perform the activities expected to be demanded in upcoming years.

An ABC model can be used as the foundation of an organization's budgeting process. In this way, decisions to authorize spending in responsibility centers become linked to outputs demanded from these units by the anticipated volume and mix of products and customers. It enables the service company to supply resources for products and customers that contribute to long-run profitability and to identify where cost reduction may be required for critical processes in the service delivery chain.

A4.04 SUMMARY

Applying ABC to service organizations requires a keen appreciation of costing for committed resources. Naive observers could look at service organizations and believe that all their costs were fixed, independent of quantity and mix of usage. Such a view would leave little motivation for developing ABC systems in such settings. But once one realizes that managers determine the supply of committed resources in anticipation of demands for services by products and customers, the rationale for linking resource usage to such demands becomes far more compelling. Managers need the information from an ABC model to make decisions about the products and services it wishes to offer, the customer segments it wishes to serve, the method of delivering the products and services to those customers, and, the supply of resources it wishes to supply for its products, services, and customers. Managers will use the ABC information to budget for the supply of resources and then to develop products and services that can be delivered to customers at prices that cover the costs of resources used, thereby enabling them to serve customers in profitable relationships.

[SRC](#)

This chapter has been excerpted from R.S. Kaplan and R.Cooper, *Cost and Effect: Using Intergrated Cost Systems to Drive Profitability and Performance*, Boston, Harvard Business School Press, 1998.

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