



CHAPTER 2

Internal Audit of Strategic Assets: Resources and Competencies

LEARNING OBJECTIVES

After reading and studying this chapter, you should be able to:

- Explain the concept of an internal audit of a firm's strategic assets and the role that it plays in preparing a strategic plan.
- Describe the three different approaches to an internal asset audit—financial performance analysis, resources and competencies review, and value chain evaluation.
- List and define the key metrics in an analysis of an organization's financial performance and condition.
- Understand the correlation between a business's financial performance and its ability to execute strategic plans.
- Define "resources" and "competencies," the differences between them, and the ways that they depend upon each other.
- List the different generic types of organizational resources, and provide examples of typical organizational competencies.
- Explain how resources and competencies may be "strengths" or "weaknesses" for an organization.
- Describe the ways that an organization can manage and use its resources and competencies.
- Define and describe graphically the internal value chain of a business.
- Show how to employ the value chain concept to reduce costs or add value.
- Understand the difference between performing activities differently and better.

The very first step in a strategic planning and management process is an organizational self-examination, an internal audit of what the organization has to work with. Such an internal audit is conducted at the corporate and strategic business unit (SBU) levels of an organization. The purpose is to identify the assets (both strong and weak) that the organization possesses for exploiting opportunities and resisting threats in its external environment. In doing this, the organization will leverage its strong points and offset or improve its weak points.

Several different approaches can be taken to examining and understanding the internal functioning of an organization and its ability to implement strategies. They are analysis of its historical and current **financial performance**, review of its strategic assets as **resources and competencies**, and breakdown and evaluation of its **value chain**. There is some overlap among these methodologies, but each provides a unique picture of the organization's strategy-making potential.

► Analysis of Historical Financial Performance and Current Financial Condition

The common denominator of current operations and future strategies in most organizations is **money**. The availability of strategic alternatives and their successful implementation depends to a large degree on the capital funds accessible to the firm. The very success of the strategies often is measured in financial terms. Strategic management employs several types of financial metrics and for several different reasons. (These issues are addressed in greater depth in Chapter 15.)

Sales, market share, and profits. The current levels of sales and profits are a measure of the success of past strategies and the need for new strategies. If they are steadily growing, they indicate that customers value the firm's products and services so

much that they will buy them in larger and larger volumes and pay a premium (over the cost of production) for them. This would be a positive indication of the firm's ability to survive and prosper. In such circumstances, there is not as great an urgency to create new strategies. In contrast, declining sales or steady sales with declining profits may indicate that certain products or services, market segments, distribution channels, or other operating parameters are no longer competitive. These data can help in deciding whether strategic changes are needed and where they should be focused.

Growth trends in these numbers may show that the firm is reaching the point on the company growth curve when economies of scale, economies of scope, and learning curve advantages will begin to kick in. Rapid growth also implies that the business will be consuming more cash than it generates. When sales growth begins to slow and level off, it may be the sign of a maturing business that can be counted on as a source of cash.

It is important to measure sales and profits over time to demonstrate the trends, and relative to other companies in the industry and to the industry as a whole. A sales growth rate that looks impressive on its own may be lower than what has been achieved by competitors. For this reason, many businesses also pay attention to their share of the market in which they are competing.

Free cash flow. Because of the different delays in its payments and receipts, as well as expenditures on capital investments, a firm's "net profits" are not usually indicative of the funds available for spending on new projects. The "free cash flow" shows how much money is left after the firm meets its existing operating and strategic cash commitments. Where the firm is in its life cycle often determines whether it has negative (during growth) or positive (during maturity or decline) cash flow. The free cash flow must be compared with the cost of the strategic initiatives that the firm is contemplating. If the firm is growing rapidly or has great strategic ambitions, internal cash flow may not be enough to finance the strategies.

External capital sources. When a business finds that it cannot finance its new strategic initiatives through internally generated capital, it will have to

turn to external sources. The two general categories of external capital are debt and equity. Debt is secured by either borrowing money or issuing corporate bonds. Equity capital is raised through the sale of stock. All external capital has a cost that must be taken into account when planning new strategies. For strategic planning persons, a firm needs to know how much it can borrow and at what interest rate, how large a bond issue it could float and at what interest rate, and the size of a stock offering it could make and the per-share price it could expect.

Capital project hurdle rate. The hurdle rate is the minimum return a company expects on any new strategic investments. It is composed of its cost of capital plus the profit margin that it aims to earn on everything it does. The cost of capital is weighted for the amounts of different types of debt and equity that the firm has outstanding. If a proposed strategic initiative cannot earn a return that meets or exceeds the hurdle rate, it should be disapproved.

Other capital demands. Every business has a finite amount of capital available from internal and external sources and demands on that capital that inevitably exceed the amount available. There will be other strategic proposals. During a given fiscal year, some projects may already have been approved for funding. There may be required expenditures on plant and equipment that are substantial but not truly strategic in nature. Prudent financial management may suggest that the firm pay a dividend to its shareholders or buy back some of their stock. Strategy planners must be aware of all these capital demands that compete with their own.

Shareholder value. If the firm is a publicly traded for-profit entity, the value that it delivers to its shareholders is a primary factor in their continuing willingness to invest their money in the firm. That value also affects the firm's ability to raise additional equity capital in the future. Because it incorporates the cost of equity capital, use of the hurdle rate mentioned above is one tool for addressing shareholder value. It leads to several generic rules for **maintaining or increasing that value.**

- Achieve the existing level of profits with less invested capital.
- Increase the profit level without investing additional capital.
- Decrease the cost of equity capital—by raising the debt-to-equity ratio or buying back existing stock.
- Invest more capital in new strategic projects that earn a rate of return higher than the average for the firm's current operations.

The challenge for business strategists is to satisfy the often ill-advised desire of shareholders for short-term returns on their investment while focusing the firm's strategic momentum and capital investment on long-term initiatives.

Current financial strength and performance. Knowledge of a firm's current financial performance has two important applications. It is an indicator of the viability of the current operations and the success of strategies implemented in the recent past. If the metrics show signs of fiscal weakness, it may be necessary to make changes in operational methods and tactics or launch bold new strategies that take the firm in new operational directions. Financial analysts and credit rating firms also rely heavily on these data in making their decisions about whether a business is credit-worthy and deserving of additional injections of capital—debt or equity.

Well-established metrics exist for measuring financial strength and performance. Calculation of the metrics starts with the current financial facts of the organization, as reflected in a few traditional financial statements.

The **balance sheet** is a snapshot of the organization's financial position at a particular point in time. The data contained in a balance sheet can be analyzed in a variety of ways to provide a rather sophisticated understanding of the financial infrastructure and integrity of the organization.

The **operating or income statement** describes the financial currents within the organization over a period of time, typically a month, a quarter, or a year. It is a measure in financial terms of operating activity as the organization carries out its mission and strategies.

The **statement of cash flows** records the actual flows of money in and out of the organization. This is different from the income statement, which shows revenues that have been earned, though not necessarily received, and costs that have been incurred, though not necessarily paid. The information is an indicator of the organization's ability to continue meeting its operating expenses and invest in new strategies. By some reckonings, cash is the most important financial variable. Eventually, all the other fiscal measures are reduced to cold, hard cash.

The **statement of changes in owners' equity (for-profit) or net assets (non-profit)** indicates the increase or decrease in the amount by which an organization's assets exceed its outstanding liabilities. The greater the excess, the greater the value of a stockholder's interest in a company and the greater its financial strength.

The information contained in those financial statements is stark, absolute dollar figures that have no meaning by themselves. The figures must be interpreted and related to one another and to industry standards. The primary tool for this interpretation is a set of ratios that are relied on by anyone seeking a practical understanding of an organization's financial condition. Investors and creditors apply ratio analysis to financial data in order to predict future earnings and the ability to service debt. Managers use the ratios to predict the future and plan strategies that will influence the future. There are four categories of analysis ratios:

1. **Liquidity ratios** define the organization's ability to meet its short-term obligations. Liquidity measures state how readily corporate assets can be turned into cash for paying debts like loans or bonds that have come due; bills for materials, supplies, and equipment; and wages and salaries.

Current Ratio

$$\frac{\text{total current assets}}{\text{total current liabilities}}$$

This is a basic indicator of financial liquidity. Higher values mean better debt-paying capacity. If the ratio is too

high, it may indicate that too much cash is being held in the form of more liquid bank accounts or short-term securities rather than being invested wisely in longer-term strategic projects.

Average Collection Period

$$\frac{\text{net receivables}}{\text{net patient service revenue}/365}$$

This is the number of days' worth of average daily revenue that has been earned but not yet received, showing up on the balance sheet as "accounts receivable." It is an indicator of how long the average patient/customer takes to pay the bill after being discharged or receiving the product/service. Lower values mean that the organization is collecting on those bills more quickly and therefore has the cash available for paying its own debts or investing for strategic purposes.

Days Cash-on-Hand

$$\frac{\text{cash} + \text{marketable securities}}{(\text{total expenses} - \text{depreciation expenses})/365}$$

This is the number of days' worth of average daily cash payouts that the organization has on hand in the form of liquid assets. It is an indicator of how long the organization could go on paying its outstanding debts if its cash receipts stopped completely.

Average Payment Period

$$\frac{\text{total current liabilities}}{(\text{total expenses} - \text{depreciation expenses})/365}$$

This is the number of days' worth of average daily incurred expenses represented by the organization's total liabilities (e.g., accounts payable, short- and long-term debt). The larger this number, the longer it is taking the organization to pay those expenses, presumably because it does not have sufficient cash. A larger number will be more worrisome to creditors.

2. **Profitability** defines the ability to maintain and grow operations by measuring the relationship of revenues to expenses. In FP health care corporations, investors always seek the highest possible level of profitability. In NFP health care organizations, too much profit may bring criticism from the community, the Internal Revenue Service (IRS), and state tax authorities; too little profit may lead to criticism from the board of directors.

Operating Margin

$$\frac{\text{operating income}}{\text{total operating revenue}}$$

Measures how much of a firm's operating revenues are left after paying the expenses incurred in generating those revenues. This represents the traditional, popular view of a firm's profits. A higher margin is better.

Total Margin

$$\frac{\text{excess of revenues over expenses}}{\text{total revenue}}$$

This measure is similar to the operating margin except that it includes investment income in the revenues figure. It represents profits from all sources—both operational and nonoperational activities. A higher total margin is always preferred.

Return on Net Assets

$$\frac{\text{excess of revenues over expenses}}{\text{net assets}}$$

This ratio shows how well the firm is using its assets (debt and equity) to generate profits. The more profit "bang" that it can get from every "buck" borrowed or invested, the better.

3. **Operating efficiency** ratios measure how efficiently a company is using its assets to create products and services in its operations. The higher that level of operating efficiency, the more likely

that the business can meet its debt obligations and increase the value of its shareholders' investments.

Total Asset Turnover

$$\frac{\text{total operating revenue} + \text{other income}}{\text{total assets}}$$

This is a calculation of revenue from all sources as a multiple of the total assets employed to generate the revenue. The higher the multiplier, the more efficiently the organization is using its assets.

Fixed Asset Turnover

$$\frac{\text{total operating revenue} + \text{other income}}{\text{net total assets}}$$

This calculates the operating efficiency ratio for fixed assets only. It shows how productively the firm is employing its plant and equipment.

Inventory Turnover

$$\frac{\text{total operating revenue} + \text{other income}}{\text{current assets/inventory}}$$

Certain businesses must maintain inventories of raw materials, work-in-progress, and finished goods to carry out their operations. Examples are pharmaceutical companies, durable medical equipment (DME) producers, and most other manufacturers of products. Inventory management is of somewhat less concern to service-oriented entities, like hospitals and physician practices. The items held in inventory have a cash value that the firm would like to keep to the minimum necessary to support operations. This ratio shows total revenues as a multiple of the inventories used to generate them. A higher number suggests greater operating efficiency, but may also result in lost production and sales because required stock was not available. In contrast, low inventory turnover may mean that too much cash was tied up in inventories.

NON-FINANCIAL OPERATING INDICATORS

Although money is the lifeblood of an organization, and the owners of for-profit businesses tend to focus primarily on financial measures of performance, numerous non-financial indicators are used to measure the success of operations and strategies. They tend to be specific to the industry in which the industry operates. These are some of the most popular metrics for hospital operating performance.

$$\text{Average Length of Stay (ALOS)} = \frac{\text{patient days}}{\text{discharges}}$$

This number measures how long the average patient spends in the hospital between a particular admission and discharge. Care must be taken in using this figure to compare hospitals. It can vary dramatically depending on the types of patients admitted, the specific diseases/ailments for which they are treated, and the severity of their conditions. The acceptability of the actual number depends on how the hospital is reimbursed. A lower ALOS is desirable in the case of DRG or capitated reimbursements, whereas a higher figure is preferred if payment is on a per diem or fee-for-service basis.

$$\text{Occupancy Rate} = \frac{\text{patient days}}{365 \times \text{licensed beds}}$$

This metric shows how full the hospital is—what percentage of its beds are occupied by patients. It is in the firm's interest to keep the occupancy rate as close to 100 percent as possible, in order to spread the fixed costs of operating the hospital facility across a larger number of patients.

$$\text{Outpatient Revenue as Percentage of Total Revenues} = \frac{\text{outpatient revenue}}{\text{total revenue}}$$

This metric reveals the percentage of total hospital revenues that are accounted for by patients served on an outpatient basis. A higher percentage is desirable because of the preference throughout the health care system to treat patient conditions in the lowest-intensity setting possible. This means that outpatient revenues are almost always preferable to inpatient revenues.

Full-Time Equivalent (FTEs) per Occupied Bed

This is a measure of the number of employees in all categories that it takes to support each bed with a patient in it. A lower ratio suggests that the hospital has found a more efficient way to provide services to its patients. However, maintaining staffing levels too low may detrimentally affect the quality of those services. A facility's optimal FTE-to-bed ratio will depend on the mix of patient cases that it typically sees.

4. **Capital structure ratios** describe the composition of the package of capital that an organization has available to fund its endeavors. The capital may come from a variety of sources (the basic broad categories being debt and equity), and the mix of those sources is a major factor in determining the organization's long-term liquidity

and ability to raise additional capital. Creditors and bond rating firms look at capital structure in evaluating creditworthiness.

Net Asset/Equity to Total Assets

$$\frac{\text{net assets (or equity)}}{\text{total assets}}$$

This is a ratio between a firm's equity capital and its total capital. Creditors like to see a higher ratio here; the higher proportion of equity capital means more funds are available to meet debt obligations. In an NFP corporation, net assets are increased through retained earnings or charitable donations. In an FP corporation, it is through retained earnings and sales of additional stock shares that equity is increased.

Long-Term Debt to Net Assets/Equity

$$\frac{\text{long - term debt}}{\text{net assets (or equity)}}$$

This ratio shows the proportion between long-term debt and owners' equity or net assets. Debt is a desirable source of capital, particularly when a business is profitable and growing. At a certain point, however, the burden of paying the interest on a large body of debt may make creditors reluctant to lend additional funds to or buy more bonds from the organization. In the interest of raising additional debt capital in the future, a lower ratio is better.

Debt Service Coverage

$$\frac{\text{excess of revenue over expenses (or net income)} + \text{depreciation} + \text{interest}}{\text{principal payment} + \text{interest}}$$

This ratio is simply a measure of a business's capacity for making the interest and principal payments on its long-term debt. It is watched closely by investment bankers and bond rating firms.

All these data are gathered and the metrics calculated continuously, then compared, both with the organization's historic performance, to reveal trends, and with industry averages and numbers for individual competitors. The metrics measure only what they were designed to measure, which may or may not be relevant to the organization's chosen strategies. In practice, it usually is necessary to devise unique criteria to measure the progress toward achievement of the objectives set for particular strategies. Some examples are patient

satisfaction for physician practices and hospitals, Healthcare Effectiveness and Data Information Set (HEDIS) ratings for health plans, and National Committee for Quality Assurance (NCQA) accreditation ratings for managed care organizations.

On the basis of ongoing analysis of its performance, the business will reach conclusions about areas in which improvement seems necessary. It may even get clues about the exact changes in strategy or strategy implementation that are called for. However, final decisions on adjustments to existing strategies or adoption of new strategies depend on a review of the business's resources and competencies available to support strategic initiatives, as well as further assessment of its industry and competitors, its markets and competitors, and a variety of external environmental factors among which the strategies will be played out.

► Resources and Competencies

Every organization can be viewed as simply a bundle of resources and competencies. The resources are either tangible or intangible. The resources have competencies—latent abilities to perform activities. It is through activities that current operations are conducted and future strategies pursued. Depending on how well they contribute to the performance of an organization's operations and the implementation of its strategies, resources, and competencies may be considered strengths or weaknesses.

What an organization is able to accomplish depends upon the resources that it possesses, the competencies of those resources, and how the organization combines them to carry out activities. Some organizations have more resources with better competencies than other organizations. Some organizations do a better job of combining and mobilizing the resources and competencies that they do possess in order to achieve their operational and strategic goals. This ability is at the core of most successful organizations.

It is not enough for a firm to possess an outstanding collection of resources and competencies. The firm must be capable of translating the

resources and competencies into the activities required by the strategies that it intends to implement. If that is not the case, the firm must either modify its strategies or acquire the necessary resources and competencies. In the first case, the firm would reexamine what it is capable of doing and look for strategies that are possible within those constraints. Alternatively, it would choose the most optimal strategies with the understanding that it would have to hire new employees, retrain existing ones, or outsource some functions, purchase new equipment, develop new systems and processes, and combine them in ways that allow execution of the strategies.

Resources

Resources are things that are owned by a business; they may be either tangible or intangible. By themselves, they accomplish nothing. A sophisticated piece of medical imaging or laboratory research equipment, sitting idle, produces no value for the organization. A highly skilled radiologist or research scientist, employed but unoccupied, performs no strategic function. What makes a difference is what they are capable of accomplishing when they are in action or operation. This latent potential of resources constitutes a firm's competencies. A competence that is triggered is an activity. The performance of activities serve as the building blocks of an organization's operations and strategies.

Resources can be grouped in the following categories, with examples.

I. **Tangible**—visible, touchable, measurable

Financial

Free cash flow—substantial amounts to cover large percentage of strategic investment needs over the next three years.

Credit rating—higher Standard & Poor's (S&P) rating allows borrowing investment capital at lower rates than competitors.

Organizational

Control and reporting systems—near real-time data analytics system allows correction of problems before they escalate.

Integrated clinical-cost management systems—generate data that enable cost cutting without jeopardizing quality.

Service-line organizational structure—more in line with the way the hospital promotes itself to market segments.

Physical

Real estate—ownership of developable plot of land in area of rapid residential growth.

Buildings—present clinic building was purpose-designed only eight years ago with room for expansion.

Equipment—molecular biology research lab contains the latest genetic engineering instruments.

Geographic location—nongovernmental organization (NGO) operates clinics in areas of greatest disease concentration.

Technological

Proprietary technologies—patents, copyrights, trademarks, trade secrets

- Patents obtained on innovative surgical procedures and medical devices developed in house
- Secured trademark protection for a highly recognizable corporate logo

II. **Intangible**—unseen, amorphous

Human—staff skills and experience, managerial judgment and insight, workforce morale, congenial labor-management relations, individual and organizational knowledge.

- Good working relationship with nurses' union
- Community health center staff is highly spirited and passionate about serving their low-income clients.

Creative—innovation, problem-solving, clinical research capabilities

- Highly creative advertising and marketing staff
- Researchers recruited from top postdoctoral programs

Perceptual—reputation with customers, suppliers, strategic partners, media, politicians, and competitors, public perceptions of specific product qualities, and organizational integrity

- Patient satisfaction ratings higher than any of its competitors
- Independent lab tests show greater durability and reliability of medical device products.

These are all positive examples of each type of resource; imagine what less desirable, negative examples might look like.

Competencies

Competencies are usually the product of combinations of resources, the most important being human resources. Examples are a person operating a piece of equipment, a person sending a report through a management control system, a person performing a patented research procedure, or several people working together to accomplish a task. Any competence with strategic potential is worth noting, preserving, building, and using. An organization needs a wide variety of competencies just to conduct its day-to-day operating activities, even if they result in no more than competitive parity with its rivals. These are some examples of health care – related competencies.

- Ability to maintain low in-hospital infection rates (hospital)

- System for minimum-error dispensing of medications (hospital)
- Ability to move a drug through the Federal Drug Administration (FDA) approval process with a minimum of cost and delay (pharmaceutical company)
- High proportion of research discoveries translated into commercial products (small biomedical research firm)
- High submission rate of accurate medical claims not returned by payers (physician practice)
- Efficient scheduling of operating room procedures (hospital)
- First mover in adopting new patient-friendly technologies like e-mail scheduling and prescription renewals (physician practice)
- Effective at maintaining good relations with contracted providers (managed care organization)
- Adept at assimilating newly acquired/merged small biotech research firms (large biotech firm)

^oThere are thousands of competencies required to operate any health care organization, particularly one providing medical services to patients. The Healthcare Leadership Alliance, a consortium of professional health care administration associations, describes 802 competencies in five domains that it believes are required by health care administrators.

SYNERGY IN THE OPERATING ROOM

A good health care example of the synergistic combining of resources and competencies is a multidisciplinary operating room (OR) team composed of physicians, nurses, and technicians. The lead physician may be a Harvard Medical School graduate and board certified, with twenty years of experience during which she has performed a particular surgical procedure hundreds of times. She is a valuable resource of the hospital. Her training and numerous repetitions of this and other procedures have made her highly competent in their performance. The benefit to the organization occurs every time that she actually performs the procedures.

Of course, the surgeon cannot carry out the procedures without the support of the other members of the OR team. Each one of them is a resource with specific competencies. They act together in carefully orchestrated unison. If the team was assembled carefully and subsequently nurtured, it may function with unique proficiency that completes procedures more quickly with clinical outcomes of higher quality. It may be hard to identify exactly what the team members do that permits them to function together so smoothly. The well-designed and equipped operating rooms help; so do the policies and procedures that are trained and enforced. This OR team is a resource with competencies that may contribute to a hard-to-duplicate competitive advantage over other hospitals.

When an organization is able to develop a competence that gives it a real competitive advantage, it is said to be a **core competence**, critical to the organization's strategic success. Such competencies have two vital characteristics: (1) because they are major contributors to product costs or features that customers are willing to pay for, and because they can be used to exploit opportunities or defend threats in the external environment, they are valuable to the organization, and (2) because they allow the organization to perform activities that its competitors cannot, and create customer value that the competitors cannot offer, and because competitors do not possess them, the competencies are considered unique. Even better is the competitive advantage that can be sustained for an extended period of time. To serve as the basis of such a sustainable competitive advantage, a competence must be difficult, expensive, or impossible for a competitor to imitate, and there must be no substitutes for it—that is, other competencies that could serve the same strategic purpose.

It would be too time consuming to compile an exhaustive list of all the resources and competencies possessed by an organization and then determine their specific competencies. They would number in the thousands or tens of thousands. There are two more selective approaches for identifying the most significant resources. A focused approach that yields useful results is to identify those resources and competencies that are strengths and weaknesses of the organization. This knowledge can inform three important categories of decisions.

1. New strategies must have their foundation in resources and competencies where the organization is strong. If a strategy depends, even inadvertently, upon areas in which the organization is weak, it is much more likely to fail.
2. A business may decide that it wishes to implement a highly advantageous strategy for which it lacks some of the appropriate resources and competencies. To permit this, it can take steps to develop or acquire them. It may accomplish this by buying specific

resources, hiring new personnel with necessary skills, retraining current staff in the needed competencies, contracting with outside firms to provide the competencies, or merging with/acquiring entire businesses that already possess the desired resources and competencies.

3. If a business faces strategically aggressive competitors, it can expect that they may target its points of weakness. It can anticipate such attacks and take steps to correct the weaknesses or minimize the damaging effects of the attacks.

This approach begins by asking key managers with knowledge of major areas of the firm's operations to identify the strongest and weakest resources and competencies within their areas of authority. It often makes sense to work with the heads of the various functional areas of the organization to come up with this information. Top management also needs to have input to this list for those resource and competence items that are organizationwide or cut across several functional areas.

Another approach is to rate the selected competencies by their degree of strength or weakness. Then, compare them with the same resources and competencies possessed by competitors. The contrasts can be highlighted through presentation in graphic formats.

Strategic Uses for Resources and Competencies

Resources and competencies are the tools that strategists have to use in carrying out their plans. It is not the number or the sophistication of a firm's resources and competencies that determines what it can accomplish, but how well the firm is able to leverage those resources to perform strategically appropriate activities. A firm can manipulate and deploy its resources and competencies to maximum advantage in a variety of generic ways.

Discovery. It may sound strange, but some businesses have resources and competencies that they are unaware of. Tangible resources are not likely to go unnoticed, but a firm may more easily

forget about certain credentials that employees possess or intellectual property that it owns. Even more likely to be missed are unique competencies of employees, machines, or computer software. Think of a billing clerk who learned several useful nursing procedures before dropping out of nursing school, the PET scanner that has always been operated at its default medium-resolution setting, or the unused coding accuracy review feature of a medical claims filing program. An organization limits its strategic possibilities by not learning about all the resources and competencies it already owns.

Creation. A business need not feel constrained by the strategy options allowed by the bundle of resources and competencies that it currently possesses. It can and must be willing to create additional assets if they will enable the implementation of strategies deemed essential to its mission and objectives. It is possible to acquire these assets by a variety of means. (See the sidebar on active management of firm resources and competencies.)

Combination. Resources and competencies have certain strategic potentials when deployed individually; they allow the performance of a great many more activities when they are used together in various combinations. Possible combinations

include machines working in synchronization, human resources employing equipment and tools in different ways, people with different skill sets working in unison toward common goals, and systems being integrated with other systems and with the people who interface with them. Artful blending and balancing of a firm's assets can produce powerful new synergies that open up new strategic opportunities.

Preservation. Resources and competencies with strategic or operational value must not be allowed to degrade or disappear. It may take greater recognition or more regular use of an asset to keep it alive. A good example is a complex surgical procedure that a surgeon must perform a minimum number of times in a year if he or she is to remain competent in it. In addition, the value of some resources and competencies can actually be multiplied by reusing them when they may otherwise seem to be used up, by sharing them with other units in the organization, or by finding new uses for them beyond their original design.

Concentration. A very important guideline for strategic asset deployment is to use just the right resource or competence for just the right purpose at just the right point in the implementation of a strategy. This also implies using the full volume of

ACTIVE MANAGEMENT OF FIRM RESOURCES AND COMPETENCIES

A firm's strategies must be matched to the strategic assets—the resources and competencies—that it has available if the strategies are to be successful. However, the firm is not restricted to the bundle of resources and competencies that it currently possesses. The firm should manage its strategic assets portfolio actively and dynamically, constantly assessing its operational and strategic requirements and taking steps to make sure that the required resources and competencies are in place when and where needed. There are several ways to accomplish this.

- Purchase the resources, which may be equipment, systems, technology, intellectual property, buildings/facilities, or real estate.
- Hire new employees with the required experience, credentials, or skill sets to interact with other resources, both nonhuman and human.
- Train and develop existing employees to have the required competencies and to perform the required activities.
- Contract with outside businesses (“outsource”) to provide whatever resources and competencies are required, but that the firm cannot readily acquire or develop.
- Merge with or acquire entire organizations that already possess the desired resources or competencies.
- Enter into strategic partnerships with other organizations to share resources and competencies that each requires for its strategic purposes.

resources or competencies necessary in a concerted effort. The value of assets can be wasted if they are dissipated or committed in inadequate amounts.

► Breakdown and Evaluation of the Internal Value Chain

Because an organization ultimately aims to create and deliver value to its customers, a second useful way to describe its inner workings is as a sequential series of activities that cumulatively build value in a product or service until it is turned over to the customer. Michael Porter captured this entire process in a concept he called the “value chain.” It is composed of primary activities (directly associated with the manufacture and distribution of a product) and support activities (assist in accomplishing the primary activities). His generic value chain is shown in **FIGURE 2-1**.

The value chain is based on the traditional manufacturing company model, which brings in raw materials as inputs at one end and outputs finished goods at the other end. Value chains in the health care and biotechnology fields have their own unique features. See **FIGURES 2-2** and **2-3** for examples of value chains for a hospital and a pharmaceutical company.

Within each of the categories in these chains (inbound logistics, production, outbound

logistics, sales and marketing, and service) are performed hundreds, if not thousands, of activities. Every one of them does, or should, create some small increment of value for the customer. Each activity can be performed well or poorly. In many cases, the same value could be created through the performance of a different activity. It also is possible frequently to create an entirely new form of value through the performance of new activities. Competitors are using their own variations of the value chain to manufacture goods and services. When a firm studies its competitors, it compares its own value chain with theirs, activity by activity. (This is discussed in more detail in Chapter 5.)

In analyzing its own value chain, a firm is looking for the points at which the most cost is incurred and the most value added. Every activity does both to some degree. No activities are free and, if they are not contributing (directly or indirectly) to product or service values, they should not be part of the value chain. The purpose of the analysis is to find opportunities for reducing costs or adding more value—in ways that the competition cannot easily copy. It is possible to describe a methodology for accomplishing this.

1. Starting with Porter’s value chain model, break down the firm’s operations into its component activities. A decision must be made about how finely the value chain will be decomposed. There is no point in trying to evaluate all the hundreds or thousands

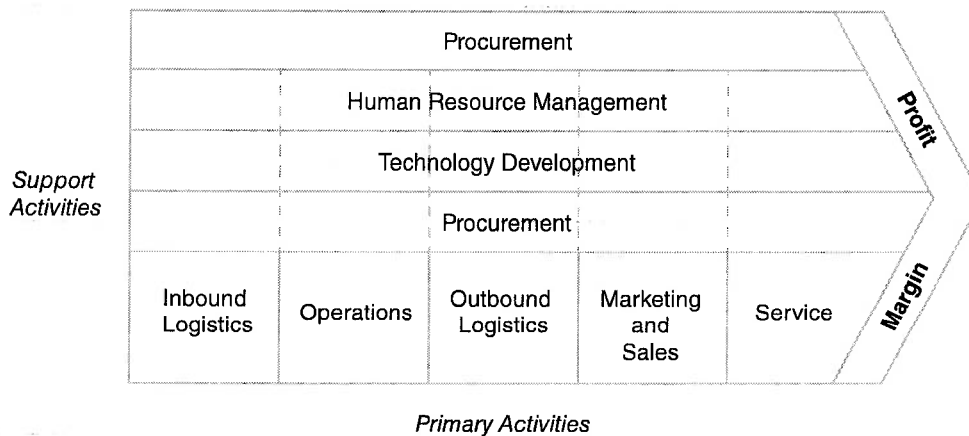


FIGURE 2.1 Porter’s Generic Value Chain