Lessons in the Service Sector

by James L. Heskett



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large food and lodging company creates and staffs more general management jobs than any ten manufacturers of comparable size. This company, like many others dispensing high customer-contact services, has eliminated functional lines of responsibility between operations and marketing. In its planning the company routinely combines operations and marketing with what I call a strategic service vision.

The most profitable large American company daily assumes the task of managing a work force of window washers, cooks, and maintenance personnel. An almost single-minded concentration on people—their jobs, their equipment, their personal development—accounts for much of its success.

The quality control process in a decentralized oilfield services business involves careful selection, development, assignment, and compensation of employees working under varying conditions and in widespread locations where close supervision is impossible. In this prosperous company, the process builds shared values and bonds people together.

An international airline, by paying more attention to market economies than to production scale economies, reduces the average size of its aircraft and increases its net income.

Products introduced since 1982 by a well-known financial service generated 10% of its revenues in 1985. The raw material for these products is data already existing in other forms in the company's vast data base.

These examples give a glimpse of forward-looking

management practice. When examined closely, they offer insights into the ideas on which successful competitive strategies have been fashioned in the much-maligned and little-understood service sector.

It's no coincidence that dominant industries have cutting-edge management practices. Some U.S. railroads in the nineteenth century pioneered in divisionalized management of their far-flung systems and in good procurement procedures to support their sizable construction and operational needs. At the turn of the century, basic industries led the way in experimenting with scientific management. Then the rise of the large consumer goods manufacturer, epitomized by the auto industry, spawned concepts of decentralization and a full product line aimed at carefully segmented markets.

Today service industries have assumed the mantle of economic leadership. These industries—encompassing trade, communications, transportation, food and lodging, financial and medical services, education, government, and technical services to industry—account for about 70% of the national income and three-fourths of the nonfarm jobs in the United States. In generating 44 million new jobs in the past 30 years, they have absorbed most of the influx of

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women and minorities into the work force, softened the effects of every post–World War II recession, and fueled every recent economic recovery.

In view of this leadership role, now is a good time to look at the exemplars in the service sector for insights into ways of boosting productivity and altering competitive strategies. Despite their diversity, leading companies in many service industries display some common themes and practices. And they yield lessons for managers in any sector of business. Let's look first at the way the best service companies are structured.

INTEGRATED FUNCTIONS

Most goods-producing businesses follow the traditional organizational pattern of separate and equally important marketing and manufacturing functions, with coordinating authority at high levels. Some service businesses do the same thing, but the pattern is much less common in service companies where contact with customers is close, as in retailing, passenger transport, and food and lodging. In these businesses, service is marketed and produced at the same place and time, and often by the same person. Naturally, close coordination between marketing and operations management in these cases, regardless of reporting relationships, is essential.

Integration of marketing and operations is often found at very low levels in these organizations. In fact, in a survey of field managers in four multisite service companies, more than 90% claimed responsibility for operations, personnel, and marketing. They could not say which was most important, and paid great attention to each.¹

Even where operations are buffered from marketing activities in organizations offering little customer-contact service, there are ways to break down the traditional functional barriers. Several years ago, the Chase Manhattan Bank launched an effort to upgrade its nonloan products, improve its external communications and customer service, and make its back-office (production) operations more market based. A weak spot was Chase's international business. In the highly visible "product" of international money transfer, differences of viewpoint between marketing—embodied in the account relations manager in the field—and the back office in New York had frustrated communication. Errors were frequent, a large backlog of inquiries about balances and transactions had piled up, and morale in the operations group was poor.

A study ordered by the executive put in charge showed that headquarters accounted for operational errors in only about one-third of all the inquiries and that the marketing people had little idea what operations could offer the bank's customers. The executive traced the backlogged errors to their sources, often a correspondent bank, and resolved them. He launched a campaign to improve operations staff morale around the theme "We make it happen" and formed a new group, the customer mobile unit, consisting of the bank's most experienced international operations people. The unit visited Chase customers at their businesses to help resolve problems and smooth operations. The executive brought the marketing and back-office people together to talk about ways to improve the flow of information. Perhaps most important, the bank revised reporting relationships so that operations units serving specific market segments reported to both the customer relationship manager and the head of operations—a move that improved functional coordination.²

The product manager's job was created in many manufacturing organizations to address the problem of coordinating manufacturing and marketing. But in most cases, product managers have had profit responsibility without the authority to coordinate. Assignment to these positions has been regarded as temporary, which encourages decisions with a short-term orientation.

Because of their importance, the high-contact service company makes a point of developing numbers of marketing-operations managers, often carrying the title of store or branch manager. At hand, therefore, is a large cadre of talent from which the company can draw senior managers already trained for administrative responsibilities.

STRATEGIC SERVICE VISION

The need of most service organizations to plan as well as direct marketing and operations as one function has led to the formation in leading companies of what I call a strategic service vision. It consists of identification of a target market segment, development of a service concept to address targeted customers' needs, codification of an operating strategy to support the service concept, and design of a service delivery system to support the operating strategy. (These basic elements appear in labeled columns in *Exhibit 1*.)

A company naturally tries to position itself in relation to both the target market and the competition. The links between the service concept and the operating strategies are those policies and procedures by which the company seeks to maximize the difference between the value of the service to customers (the service concept) and the cost of providing it. This difference, of course, is a primary determinant of profit. And the link between the operating strategy

EXHIBIT 1 Externally (EXHIBIT 1 Externally Oriented Strategic Service Vision	ice Vision				
BASIC ELEMENT	INTEGRATIVE ELEMENT	BASIC ELEMENT	INTEGRATIVE ELEMENT	BASIC ELEMENT	INTEGRATIVE ELEMENT	BASIC
Target Market Segments	Positioning	Service Concept	Value-Cost Leveraging	Operating Strategy	Strategy-Systems Integration	Service Delivery System
What are common characteristics of important market segments? What dimensions can be used to segment the market? Demographic? Psychographic? How important are various segments? What needs does each have? In what manner? By whom?	How does the service Concept propose to meet coustomer needs? How do competitors meet these needs? How is the proposed service differentiated from competition? How important are these differences? What is good service? Does the proposed service concept provide it? What efforts are required to bring customer expectations and service is: capabilities into alignment? Designed? Delivered? Marketed?	What are important elements of the service to be provided, stated in terms of results produced for customers? How are these elements supposed to be perceived by the target segment? By the market in general? By employees as a whole? How do customers perceive the service concept? What efforts does this suggest in terms of the manner in which the service is: Designed? Delivered? Marketed?	To what extent are differences between perceived value and cost of service maximized by: Standardization of certain elements? Customization of certain elements? Emphasizing easily leveraged services? Management of supply and demand? Control of quality through— Rewards? Appeal to pride? Visibility and supervision? Peer group control? Involving the customer? Effective use of data? To what extent does this effort create barriers to entry by potential competition?	What are important elements of the strategy? Operations? Financing? Marketing? Organization? Human resources? Control? On which will the most effort be concentrated? Where will investments be made? How will quality and cost be controlled? Measured? Incentives? Rewards? What results will be expected versus competition in terms of: Quality of service? Cost profile? Productivity? Morale and loyalty of servers?	To what extent are the strategy and delivery system internally consistent? Can needs of the strategy be met by the delivery system? If not, what changes must be made in: The operating strategy? The service delivery system? To what extent does the coordination of operating strategy and service delivery system ensure: High quality? High morale and loyalty of servers? To what extent does this integration provide barriers to entry to competition?	What are important features of the service delivery system, including: The role of people? Technology? Equipment? Layout? Procedures? What capacity does it provide? Normally? At peak levels? To what extent does it: Help ensure quality standards? Differentiate the service from competition? Provide barriers to entry by competitors?

and the service delivery system is the integration achieved in the design of both. (These integrative links appear in labeled columns in *Exhibit 1*.)

To see how the strategic service vision works, examine the Hartford Steam Boiler Inspection & Insurance Company. For many years, HSB has been in the business of insuring industrial and institutional equipment. Its market targets are organizations using boilers and related pieces of equipment with high operating risk. It offers the same risk reduction as many other insurance companies but positions itself against the competition by emphasizing cost reduction as well.

HSB concentrates on a few types of equipment and has built a large data base on their operating and performance characteristics. (Manufacturers of the equipment often turn to HSB for wear and maintenance data.) The information furnishes the actuarial base on which HSB prices its insurance. The company's engineers, who inspect customers' equipment before and after it is insured, are also qualified to give advice on preventing problems and improving utilization rates, and through many years of association they often get very close to their customers. As a service manager of one HSB client told me, "If I tried to replace that insurance contract, my operating people in the plant would let me know about it."

This practice enhances the perceived value of the service to the customer at little extra cost to HSB. Of course, by reducing the risk to the customer HSB can improve its own loss ratio.

HSB has a larger cadre of engineers than any of its competitors. These engineers, in tandem with the big data base, make up a service delivery system that capitalizes on the knowledge of marketing and operating managers at all levels of the organization.

The net result is a strategic service vision (though HSB doesn't use the term) that is highly valued by its customers and very profitable for its provider. It addresses implementation issues as part of the strategic plan, and it requires agreement and coordination among marketing and operating managers throughout the organization.

INNER-DIRECTED VISION

High-performance service companies have gained their status in large measure by turning the strategic service vision inward: by targeting important groups of employees as well as customers. In the head offices of these organizations, questions such as those listed in *Exhibit 2* are heard often. The questions parallel those in *Exhibit 1*; but in asking them about employees, management shows it's aware that the health of the enterprise depends on the degree to which core

groups of employees subscribe to and share a common set of values and are served by the company's activities.

The basic elements (columns are labeled as in Exhibit 1) start with the service concept designed with employees' needs in mind. The operating strategy is set to meet these needs in a superior fashion at the lowest cost, a result often achieved through the design of the service delivery system. The integrative elements, shaded lighter, include positioning of a service concept, which, it is hoped, will lead to low turnover, low training costs, and the opportunity to develop shared goals and values. High-performance service organizations invariably have operating strategies designed to maximize differences between operating costs and value perceived by employees in their relations with the company. And delivery systems designed with the operating strategy in mind can form the foundation for remarkable gains in productivity.

A case in point is the ServiceMaster Company, based in Downers Grove, Illinois, which manages support services for hospitals, schools, and industrial companies. It supervises the employees of customers' organizations engaged in housekeeping, food service, and equipment maintenance. These are services that are peripheral to the customers' businesses and therefore receive little management attention.

Many of the people whom ServiceMaster oversees are functionally illiterate. To them, as well as its own managers, ServiceMaster directs a service concept centered around the philosophy stated by its CEO: "Before asking someone to do something, you have to help them be something." ServiceMaster provides educational and motivational programs to help these employees "be something."

To its own supervisors the company offers training that leads to an ambitious "master's" program taught in part by the chief executive. New responsibilities and opportunities present themselves via the rapid growth of the company, approximating 20% per year, nearly all of it from expansion of existing operations rather than acquisition. Elaborate training aids and a laboratory for developing new equipment and materials enhance the employee-managers' "be something" feeling.

For customers' employees ServiceMaster tries to build the "be something" attitude and improve their productivity by redesigning their jobs and by developing equipment and pictorial, color-coded instructional materials. In most cases it is the first time that anyone has paid attention to the service of which these employees are a part. ServiceMaster also holds weekly sessions to exchange ideas and offers educational programs to, among other things, develop literacy. ServiceMaster also recruits up to 20% of its

BASIC ELEMENT	INTEGRATIVE ELEMENT	BASIC ELEMENT	INTEGRATIVE ELEMENT	BASIC ELEMENT	INTEGRATIVE ELEMENT	BASIC
Target Market Segments	s Positioning	Service Concept	Value-Cost Leveraging	Operating Strategy	Strategy-Systems Integration	Service Delivery System
What are common characteristics of important employee groups? What dimensions can be used to describe these employees? Demographic? Psychographic? How important are each of these groups to the delivery of the service? What needs does each group have? How well are these needs being served? In what manner? By whom?	How does the service concept propose to meet elements of employee needs? How do competitors meet for employes such needs? How are relationships with employees differentiated from those betwen competitors and their employees? How are the sed from those betwen competitors and their group? What is "good service" to this suggest employees? What furthe proposed service is: Service concept provide it? Does the proposed service is: Service concept provide it? What efforts are required to bring employee expectations and service capabilities into alignment?	What are important elements of the service to be provided, stated in terms of results produced for employees and the company? How are these elements supposed to be perceived by the targeted employee group? How are these elements perceived? What further effort does this suggest in terms of the manner in which the service is: Designed? Delivered?	To what extent are differences between returns to employees and provision of the the level of effort they put forth maximized by: The design of the service concept? The design of the operating of strategy? The design of the operating how desirable strategy? The leveraging of scarce Increase emploskills with support system? productivity? The management of provided for: Control of quality The management of provided for: Control of quality Appeal to pride? Appeal to pride? Beer group control? Subervision? Supervision? Selection? Selection? Fer group control? Selection? Fer group control? Selection? Effective use of data? Compensation? Association?	How important is direct human contact in the provision of the service? To what extend have employees been involved in the design of the service concept and operating strategy? How desirable is it to: Increase employee satisfaction? Increase employee productivity? What incentives are provided for: Quality? Productivity? Cost? How does the strategy address employee needs for: Selection? Assignment? Development? Compensation? Compensation?	To what extent are the strategy and the delivery strategy and the delivery system for serving important employee groups internally aconsistent? To what extend does the integration of operating strategy and service delivery system ensure: High quality? Layout? Normally? Normally? Normally? Normally? At peak periods of of the target employee group? To what extent doe help employees: Meet quality stand Differentiate their s Achieve expectation about the quality of work life?	What are important features of the service delivery system, including: The role of people? Technology? Equipment? Layout? Procedures? What does it require of target employee groups? Normally? At peak periods of activity? To what extent does it help employees: Meet quality standards? Differentiate their service from competitors? Achieve expectations about the quality of their work life?

own managers from the ranks in jobs it handles. The service concept clearly is improved self-respect, self-development, personal satisfaction, and upward mobility.

Another company slogan, repeated often, is "to help people grow." When a hospital served by the company decided to hire a deaf person, ServiceMaster's local head didn't object but instead authorized three supervisors to take a course in sign language.

It should be no surprise that the turnover rate among ServiceMaster's 7,000 employees is low. Further, the turnover rate in organizations it services is much lower than the averages for their industries. And when ServiceMaster takes a job, the productivity achieved by supervised support workers invariably rises dramatically.

Now a billion-dollar company, ServiceMaster had a return on equity from 1973 through 1985 that was the highest of all the largest service or industrial companies in the United States, averaging more than 30% after taxes. It oversees the support service employees for 15 hospitals in Japan, which probably makes it the largest exporter of managerial talent to Japan. According to one ServiceMaster executive, "The Japanese immediately recognize and identify with what we do and how we do it." This company turns its strategic service vision inward with dramatic results.

THE VISION APPLIED

In addition to building a strategic service vision, the best service companies apply it to customers and to those who deliver the service and oversee its delivery—in new or different ways. From my study of organizations like Hartford Steam Boiler and Service-Master, I've gathered a series of lessons useful for service providers to consider. These lessons can furnish food for thought for goods producers too.

Rethink Quality Control

Executives whose careers have spanned service as well as manufactur-ing agree that reaching a consistently high quality level is tougher in services.

In high-contact (so-called high-encounter) services, the interaction between two or more people varies with each transaction. In low-contact services, people many miles from the customer have to rely on their own judgment in handling orders and other transactions and in fielding complaints.

Those who have tried to solve the quality control problem by adding more supervision have found that it limits effectiveness. A service transaction cannot be halted, examined, and recycled like a product.

The most effective approaches to the problem in-

clude restructuring of incentives to emphasize quality, designing jobs to give service providers higher visibility in dealing with customers, and building a peer group to foster team-work and instill a sense of pride.

One incentive that is often effective in organizations ranging from rapid transit companies to hotels is the employee-of-the-month award—especially if based on customer feedback. Both monetary and non-monetary incentives have been used successfully. What's more, the cost is low.

Making the person who delivers the service more visible is another technique. In England, at the Lex Service Group's luxury auto dealerships, the customer is encouraged to go directly to the mechanic working on the car. The Shouldice Hospital near Toronto, Canada, specializes in the repair of hernias using only local anesthetic—a practice that allows the doctor to talk with the patient during the operation. Defective work is referred to the doctor responsible. The remission rate for hernias performed at Shouldice is less than one-tenth that of the average North American hospital. At Benihana, the U.S. chain of Japanese-style steak houses, the chef cooks at a grill in front of the restaurant guests. The chef's visibility and proximity to customers promote a consistently high quality of service and a consistently high level of tips.

Incentives and visibility may be insufficient for those tasks performed without supervision and out of view of the customer. In these cases, some companies rely on careful selection and thorough training of employees and the development of programs to build both a sense of pride in the service and a sense of identification with the company. This bonding process can be hard for rivals to emulate and can thereby contribute to competitive advantage.

Schlumberger's wire-line service has roughly 2,000 geological engineers, each responsible for a mobile rig equipped with more than \$1 million worth of computers and electronic gear that help predict the outcome of petroleum producers' drilling efforts. Each year the company recruits those it considers the brightest of the crop of college engineering graduates, spends months teaching them how to use the equipment, and goes to great lengths to make them feel a part of a special tradition. As one engineer put it, "Indoctrination is just as important as technical training." This is all in preparation for an assignment to represent Schlumberger in the field, with-out direct supervision, often in a remote part of the world. Two measures of the success of this program are Schlumberger's dominant share of the world's wireline business and the profit-to-sales ratios for this company, which consis-tently exceed others in its industry in good times and bad.

EXHIBIT 3How Success Builds High-Contract Service



Often effective in achieving and maintaining quality is peer group control, supported by incentives, training, job design, and service delivery system design. In cases where professional standards have been established for a task, they reinforce peer group control.

In an architectural firm, the mere existence of a policy requiring partners' review of every piece of work can keep partners and associates on their toes. Surgeons are sometimes assigned in teams to foster the learning process and encourage peer group control. A partner of a leading real estate development company told me, "There are three things I'm most concerned about in my work. In this order, they are not to embarrass my colleagues, not to cast a bad light on the company by inadequately serving my clients, and making money." It's not surprising that this company has a strong sense of shared values, reinforced by a policy of encouraging partners to invest in the projects that they propose and carry out.

Recent research suggests that the internal strategic service vision, quality control, and success are connected, especially in those providers of high-encounter service requiring judgment in delivery (shown as the "quality wheel" in *Exhibit 3*). Studies directly link customer satisfaction and the resulting sales volume to the satisfaction derived by the person serving the customer.³ Naturally, the more motivated the employee, the better the service.

The selection and development of employees, care in assignment, and the layout and equipment of the facility (in a high-contact environment) are all integral elements of the design of the service encounter, which in turn is based on the company's assessment of customer needs. Preconditioning of the customer may also be a part of the design of the service encounter. Review and redesign of the encounter go on continually as the organization assesses how well it is meeting those needs.

A part of the internal service vision is the design of policies and performance measures that further the fulfillment of customers' needs. For example, the server's well-being in the job apparently depends, at least in part, on the extent to which his or her superiors emphasize the solution of problems for customers rather than strict adherence to a set of policies and procedures.⁴

Driving the self-reinforcing elements of the quality wheel takes a great deal of executive time and requires an honest interest in people across the organization. The senior vice president for finance of Delta Airlines, an organization well regarded for its service and its employee programs, remarked, "I would guess that 25% of the time of the finance department officers is spent listening to people problems."

For most service companies, people obviously are more important than machines in the control of quality. But even where the machines employed carry an unusually high value, as in Schlumberger and Delta, developing and building the dedication of people takes precedence.

Reassess the Effects of Scale

In service organizations, scale economies are often much more important at the company level than at the operating unit level. This is particularly true for companies that have many units over wide areas connected by a common identity. Such scale gives McDonald's and Hertz great purchasing clout and General Cinema the advantage of selling soft drinks of its own manufacture.

Large scale at the company level is important for exploiting network effects, a phenomenon much more important in the service than in the manufacturing sector. To a point, the addition of new network links augments volume for those parts already in place, thus building average network capacity utilization. The addition of service to Las Vegas from its Memphis hub gave Federal Express more volume on the Memphis–New York link. When Visa adds a large retailer to its network of card-accepting establishments, it increases the attractiveness of its credit card to present and potential cardholders and the potential volume to be realized by retailers already accepting the card.

Bigger is not better in those service industries in which the factory must be taken into the marketplace to sell a more accessible, visible, and convenient product that meets customers' needs. Factories operated by the Hyatt and Marriott organizations (called hotels) have not, on average, grown in size for years. These companies have settled on a range of hotel dimensions that can be designed, located, and operated effectively to achieve the capacity utilization, quality of service, and financial performance they want. The range describes sizes at which diseconomies resulting from poor supervision and inflexibility tend to outweigh advantages of larger scale. In the design and siting of hotels, Hyatt and Marriott give the less quantifiable advantages of market flexibility weight equal to operating economies of scale.

At the unit operating level, many service companies have found that the loss of flexibility and greater difficulty in supervising those delivering the service far outweigh any savings realized in operating costs as unit size grows. In the rush to cut costs per seatmile, for example, many of the world's airlines bought large, wide-bodied aircraft like the Airbus 300 and McDonnell DC-10. While these planes performed admirably, their effective utilization required funneling large numbers of passengers into the airline's hub. Moreover, because business travelers, who represent the most attractive market segment, are prone to choose an airline on the basis of times and frequency of flights, the load and schedule consolidation necessary for effective employment of wide-bodied aircraft worked against the goal of building traffic.

When Jon Carlzon became CEO of Scandinavian Airlines System in 1980, wide-bodied aircraft were used extensively between the airline's hub at Copenhagen and major cities like London and Paris. With smaller DC-9s, SAS funneled travelers between the hub and other Scandinavian cities. To reclaim the business travelers SAS had lost, Carlzon relegated most of the wide-bodies to charter work and offered nonstop flights using DC-9s between Scandinavian and principal European cities.

A size question confronts nearly every power utility in the United States today. For years it was industry gospel that the more power-generating capacity concentrated in one place, the greater the economies of scale. This was the case until the 1970s, when ever-larger units began encountering reliability problems. Furthermore, construction schedule stretchouts, at times fomented by environmental groups' agitation against big plants, caused the expected powergenerating economies to vanish. Finally, an improved capability for transmitting excess energy from one market to another made it possible to buy energy for less than the big units could offer to charge. Thus, many utilities today are meeting the needs of smaller markets' fluctuating demands more economically through new means.

Replace and Create Assets with Information

For decades, manufacturers have sought ways of substituting information for assets. Foremost among these are forecasting and inventory control techniques. For many service operations, information offers creative new ways to substitute for assets.

Heating oil dealers, by maintaining data on the capacity of their customers' tanks, on habitual consumption rates, and on weather, program fuel oil deliveries to provide 100% availability while reducing delivery times and the number of trucks and drivers. These companies substitute information for assets.

The Rural/Metro Fire Department extends effective fire protection at a fraction of the cost of most municipally run fire departments. This Scottsdale, Arizona-based company analyzes data on past fires and uses much smaller, less expensive trucks staffed with smaller crews and equipped with a large-diameter hose that can shoot a lot of water on a fire very fast. On the way to a fire, a truck crew can learn the floor plan of the building to which it is going. While speeding through the streets, the crew examines a microfiche of the layout on a screen. Rural/Metro substitutes information for assets.

Many service industries are information driven, beginning with familiarity between the server and the served. In many (not all), assets have never been allowed to become dominant, perhaps because of limited capital. But with the development of new technologies for processing and communicating information, companies in these industries have advanced far beyond the use of information as a substitute for assets. They are instead using the information they have collected in one business as the basis for new services.

Companies servicing manufactured goods, for example, have built data bases on the types, wear rates, and failure rates of various parts of a furnace, appliance, or automobile. A company can use this information for sending timely service reminders to customers and also to manage parts inventories to reflect the age and condition of the particular machine serviced. In the process, the data have taken on great value for the producers of the goods—and they're willing to pay for the information.

A credit card service builds expenditure profiles for its customers; broken patterns may signal a problem like stolen cards. Theft is sometimes suspected when a large expenditure is made far from the cardholder's address. Instead of outright disallowance of a retailer's request for a big charge, one major travel card issuer tries to determine whether the cardholder is indeed traveling in the retailer's area. Information collected for this service yields person-specific data about travel patterns that often are valuable to airlines and hotel chains (to name two businesses). But the company limits the use of such information to ways that benefit its cardholders.

Dun & Bradstreet's \$2.7 billion enterprise is centered on its data base, a file of credit information describing businesses in 30 countries. Through development and acquisition, the file steadily grows. D&B has consistently realized about 10% of its revenues from business that did not exist three years before. Nearly all of these services use the same data base but package the information in different ways. A potential competitor would have to spend an estimated \$1 billion—nearly half D&B's net asset value—to duplicate the data base.

Though a data base may constitute a service provider's most important asset, it doesn't appear on the balance sheet and can't be depreciated. But the degree to which many such companies rely on an accumulation of knowledge as their chief competitive weapon and source of new business development suggests opportunities for their counterparts in the manufacturing sector.

Harlan Cleveland has pointed out that information, unlike most manufactured products, is often infinitely expandable (as it is used), compressible, substitutable (for capital, labor, or physical materials), transportable, diffusive (hard to keep secret), and sharable (as opposed to exchangeable).⁵ If it is infinitely expandable, those who possess it are limited

only by their imagination in creating new ideas, revenue sources, and job opportunities. As the demand for creative exploitation of information grows, so will job creation in the service sector.

THE SERVICE ECONOMY

Many successful service providers have strategies in common that offer lessons to other companies. Among these are:

- Close coordination of the marketing-operations relationship
- A strategy built around elements of a strategic service vision
- An ability to redirect the strategic service inward to focus on vital employee groups
- A stress on the control of quality based on a set of shared values, peer group status, generous incentives, and, where possible, a close relationship with the customer
- A cool appraisal of the effects of scale on both efficiency and effectiveness
- The substitution of information for other assets
- The exploitation of information to generate new business

Why these particular lessons among all I might cite? For one reason, they feature characteristics that distinguish many service industries from goods-producing industries; notice the emphasis on people, ideas, and information instead of things. For another, they promise twin benefits as part of a business strategy. Each can provide further differentiation of the service product as well as lower costs.

These lessons have significance for the economy too. While the service economy has wrought a gigantic social restucturing of the United States, it has come in for unwarranted criticism for its low rate of productivity gains. Companies like those I have described, however, have created new jobs while raising productivity. If other companies learn these lessons, job opportunities in the service sector will continue to expand and productivity continue to rise. These developments will ease the pressures for the inflation of service prices, sharpen the already respected competitiveness abroad of U.S.-based services, and contribute to the partnership between services and manufacturing that is crucial to a healthy, balanced national business base.

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