Designing Services That Deliver

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We're all familiar with the symptoms of service failure. Your shirt comes back from the laundry with a broken button. Within a week of paying an outrageous repair bill, that ominous rattle reappears in your car's engine. A customer service representative says he'll get back to you and doesn't. An automatic teller swallows your card.

Examples of poor service are widespread; in survey after survey, services top the list in terms of consumer dissatisfaction. Ideas like H&R Block's approach to tax preparation, the McDonald's formula for fast-food service, and Walt Disney's concept of entertainment are so few and far between that they seem to be the product of genius—a brilliant flash that can never be duplicated.

Faced with service problems, we tend to become somewhat paranoid. Customers are convinced that someone is treating them badly; managers think that recalcitrant individual employees are the source of the malfunction. Thinly veiled threats by customers and managers are often first attempts to remedy the problem; if they fail, confrontation may result.

But these remedies obscure the basis for a lasting "cure." Even though services fail because of human incompetence, drawing a bead on this target obscures the underlying cause: the lack of systematic method for design and control.

The development of a new service is usually characterized by trial and error. Developers translate a subjective description of a need into an operational concept that may bear only a remote resemblance to the original idea. No one systematically quantifies the process or devises tests to ensure that the service is complete, rational, and fulfills the original need objectively. No R&D departments, laboratories, or service engineers define and oversee the design. There is no way to ensure quality or uniformity in the absence of a detailed design. What piecemeal quality controls exist address only parts of the service.

There are several reasons for the lack of analytical service systems designs. Services are unusual in that they have impact, but no form. Like light,

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Considering the extent to which the service industry contributes to our GNP, very little has been said or written about the application of rational management techniques to the development of new services. Many believe that good service results from the style of an individual entrepreneur or company and is therefore highly idiosyncratic.

As a result of her years of experience with service organizations, Ms. Shostack thinks it's time that managers subject service development to more rigorous analysis and control. This very pragmatic article describes how the use of a blueprint can help a service developer not only to identify problems before they happen but also to see the potential for other market opportunities. While the blueprint is most useful to managers developing new services, others can apply the same principles to test the quality of services for which they contract.

Ms. Shostack is senior vice president in charge of the Private Clients Group at Bankers Trust Company. A former vice president at Citibank and chief of staff of that institution's Investment Management Group, she has headed the marketing committee of the American Bankers Association Trust Division and chaired the American Marketing Association's special task force on service marketing. Author of a marketing management column for The American Banker, *she also serves on the editorial advisory board of the* International Journal of Bank Marketing *and the* Service Industries Journal.

they can't be physically stored or possessed and their consumption is often simultaneous with their production.

People confuse services with products and with good manners. But a service is not a physical object and cannot be possessed. When we buy the use of a hotel room, we take nothing away with us but the experience of the night's stay. When we fly, we are transported by an airplane but we don't own it. Although a consultant's product may appear as a bound report, what the consumer bought was mental capability and knowledge, not paper and ink. A service is not a servant; it need not be rendered by a person. Even when people are the chosen means of execution, they are only part of the process.

Outstanding service companies instill in their managers a fanatical attachment to the original service idea. Believing that this product of genius is the only thing they have going for them, they try to maintain it with considerable precision. They bring in methods engineers to quantify and make existing components more efficient. They codify the process in volumes of policies and procedures. While the outline of a great service concept may be reflected in these tools, the procedures are only fragmented views of a more comprehensive, largely undocumented phenomenon. Good and lasting service management requires much more. Better service *design* provides the key to market success, and more important, to growth.

The operations side of service management often uses work flow design and control methods such as time-motion engineering, PERT/GANTT charting, and quality-control methods derived from the work of W. Edwards Deming. These procedures provide managers with a way to visualize a process and to define and manipulate it at arm's length. What they miss is the consumer's relationship to, and interaction with, services. They make no provision for people-rendered services that require judgment and a less mechanical approach. They don't account for the service's products that must be managed simultaneously with the process. And they don't allow for special problems of market position, advertising, pricing, or distribution.

We can build on the strength of these operational systems, however, to come up with a more comprehensive and workable framework for addressing most issues of service development. We can devise a blueprint for service design that is nonsubjective and quantifiable, one which will allow developers to work out details ahead of time. Such a blueprint gives managers a context within which to deal with the management and control of the process.

Designing a Blueprint

A service blueprint allows a company to explore all the issues inherent in creating or managing a service. The process of designing a blueprint involves the consideration of several issues:

Identifying processes. The first step in creating such a blueprint is mapping the processes that constitute the service. *Exhibit I* maps a shoeshine parlor. As the service is simple and clear-cut, the map is straightforward. For more complex services, identifying and defining the processes involved may be difficult and result in a large, complicated diagram. Tax-return preparation or health care, for example, involves many decision points, alternative courses of action, and variable methodologies. Portfolio management, car repair, and even tailoring require contemplation and observation before diagramming.

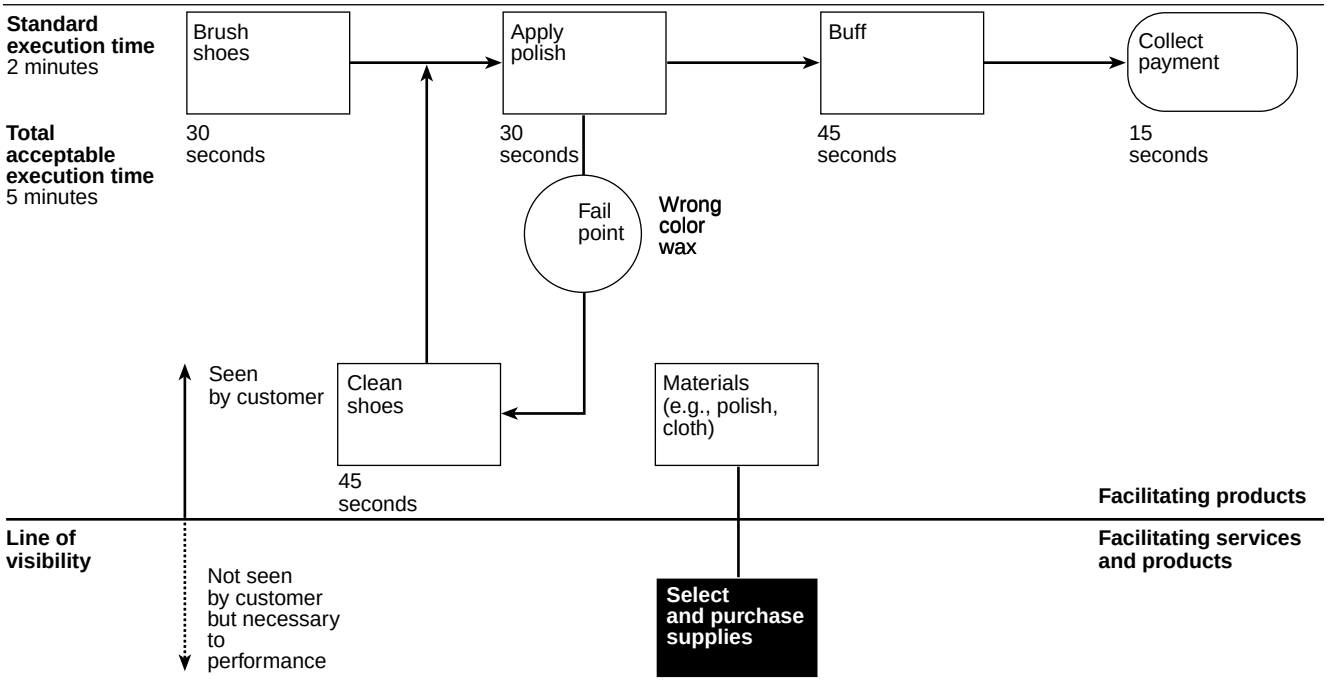
Even within the simplest process, further definition is beneficial; in shoeshining it might be useful to specify how the proprietor will perform the step called "buff." Definition doesn't mean you must mechanize all procedures. But identifying the components of a step or action reveals the inputs needed and steps covered, and permits analysis, control, and improvement. For example, a doctor or a lawyer would do well to break down the "problem diagnosis" step.

It is important to watch out for parts of the service that the consumer does not see, like purchasing of supplies. Though invisible, these processes are important because changing them may alter the way consumers perceive the service. If, for example, a bank redesigns a computer program so that it produces a different account statement for customers, the bank may affect its image or other consumer perceptions of value. These subprocesses are integral to the success of the service.

Isolating fail points. Having diagrammed the processes involved, the designer can now see where the system might go awry. The shoeshiner may pick up and apply the wrong color wax. So the designer must build in a subprocess to correct this possible error. The identification of fail points and the design of fail-safe processes are critical. The consequences of service failures can be greatly reduced by analyzing fail points at the design stage. When designers and managers think through potential problems together in advance, the quality of service execution is invariably higher.

Establishing time frame. After diagramming a service profile, identifying processes and vulnerabili-

Exhibit I Blueprint for a Corner Shoeshine



ties, and building in fail-safe measures, the designer must consider the execution.

Since all services depend on time, which is usually the major cost determinant, the designer should establish a standard execution time. As a blueprint is a model, the design should also allow for deviation from standard execution time under working conditions. The amount of latitude necessary in the time frame will depend on the complexity of the delivery.

In the shoeshine example, the standard execution time is two minutes. Research showed that the customer would tolerate up to five minutes of performance before lowering his or her assessment of quality. Acceptable execution time for a shoeshine is then five minutes.

Analyzing profitability. The customer can spend the three minutes between standard and acceptable execution time at the corner parlor waiting in line or during service, if an error occurs or if the shoeshiner does certain things too slowly. Whatever its source, a delay can affect profits dramatically. *Exhibit II* quantifies the cost of delay; after four minutes the proprietor loses money.

A service designer must establish a time-of-service-execution standard that precludes unprofitable business and maintains productivity. Such a standard not only helps measure performance and control uniformity and quality, it also serves as a model for distribution of the service to far-flung locations.

Exhibit II Shoeshine Profitability Analysis

		Execution Time		
		2 minutes	**3 minutes**	**4 minutes**
Price		$.50	$.50	$.50
Costs	Time @ $.10 per minute	.20	.30	.40
	Wax	.03	.03	.03
	Other operating expenses	.09	.09	.09
Total costs		**$.32**	**$.42**	**$.52**
Pretax profit		**$.18**	**$.08**	**($.02)**

Delivering the Service

Recruiting, training, and general management are important considerations in services rendered by people, and for complex professional occupations such as legal, consulting, or medical services these factors are of paramount importance. But some ser-

vices can be rendered mechanically, as banks have demonstrated with automatic tellers, and some can be performed by customers themselves, as at salad bars.

Implementation constantly evolves. Schools, for example, once depended entirely on teachers to render the service of education; today computers and television have an important function in the classroom. A service designer must weigh alternate means of execution, for example, by considering the merits of using a buffing machine in the process of shoeshining. The productivity and profit margin increases must be weighed against a customer's perception of lower quality. A blueprint facilitates the analysis of cost-benefit trade-offs and can be used to test the appeal of different designs to prospective customers.

A blueprint can help the service developer with other problems. For the pricing department, it provides a basis for a thorough cost analysis; for distribution, a map to be duplicated; for promotion, tangible evidence it can manage and control.

Highlighting Tangible Evidence

To maintain credibility, the service must select and manage products with care. In some cases, products are optional—a consultant may not have to present a written report for instance. Consumers, however, often deduce the nature of the service from this type of circumstantial evidence. The design of a service should therefore incorporate the orchestration of tangible evidence—everything the consumer uses to verify the service's effectiveness. The setting, including color schemes, advertising, printed or graphic materials, and stationery, all proclaim a service's style. The design should not be carelessly delegated to outsiders or left to chance.

Airlines have learned this lesson. The interior and exterior decor of the plane, flight attendants' uniforms, the appearance of the reservation desk, ticket folders, baggage tags, and advertising graphics all tell the customer what kind of service to expect. They either reinforce or contradict personal experience with the airline.

Making People Special

To the customer, people are inseparable parts of many services. The presence of people, however, brings a higher risk that service quality will vary. At the design stage, the developer must plan and consider every encounter between consumer and provider. The good manners and attentiveness customers associate with good personal service must be made part of the hiring, training, and performance standards of the company. Indifferent or surly execution can devalue the service.

Both the Disney organization and IBM offer outstanding examples of superior people management to provide uniform service. Airlines and fast-food chains "package" service personnel in clothes that proclaim and reinforce an overall service identity. These companies invest heavily in training and retraining at all levels.

At the beginning and end of the design cycle lies the marketing goal to which all service organizations aspire: benefiting customers. For the customer, a good shoeshine is "shiny shoes," "clean shoes," or "preservation." It goes without saying that market research throughout the design cycle is the best control mechanism to ensure that the service meets the goal.

Modifying a Service

Market research during a service's operating life enables managers to measure quality and identify needs for redesign.

Exhibit III shows how the designer may add a repeat of steps 2 and 3 in the shoeshine service to create a two-coat shine, and justify a 20–cent price increase, thus increasing the profit margin by nearly 30%. Moreover, the shoeshiner might decide to add a receipt or a sample of shoepolish as tangible evidence of good care. Such service reminders (the shoeshiner could print his or her name and address on the shoepolish sample) could lead to a premium price for a premium service.

A designer can use a blueprint to engineer new market products or services (see *Exhibit IV*). A designer can do much at the drawing board, well before expensive formal market introduction of the service.

Applying the Principles

Service blueprint methods can be applied in the development of a discount brokerage service in a large money-center bank (see *Exhibit V*). Very little of this service is visible to customers. In fact, customers have virtually no conception of the processes that underlie most services.

Discount brokerage is not particularly complex, but the blueprint condenses and simplifies the service and omits many minor steps. For example, the step "prepare and mail statements" includes more than 12 activities, such as printing statements and stuffing and sealing envelopes.

The important fail points (F) show where the service may experience quality or consistency problems. Telephone communication, for example, is a

Exhibit III Modified Shoeshine Blueprint

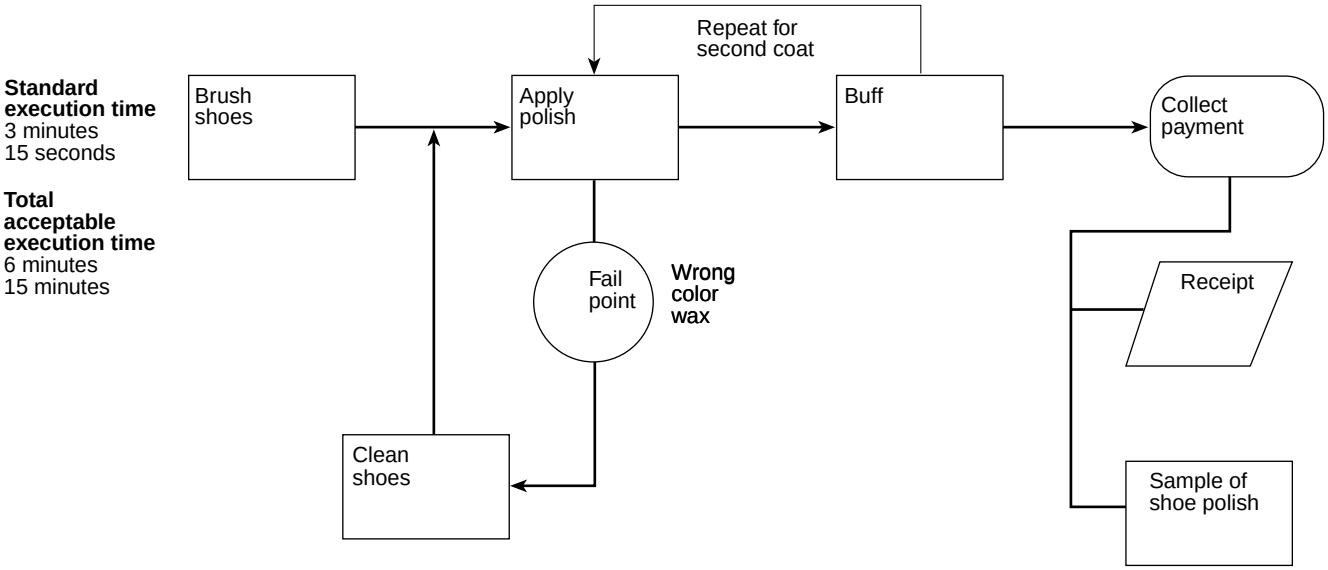
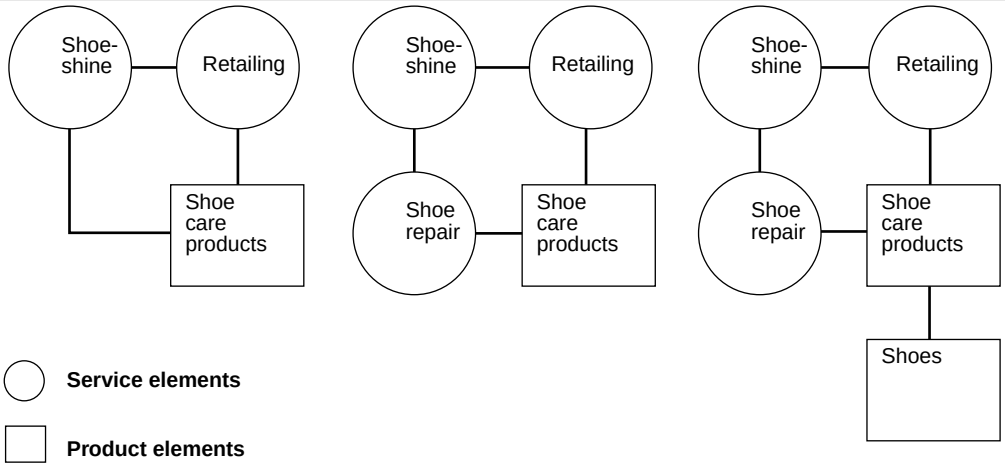


Exhibit IV Blueprint for More Complex Shoe Products and Services

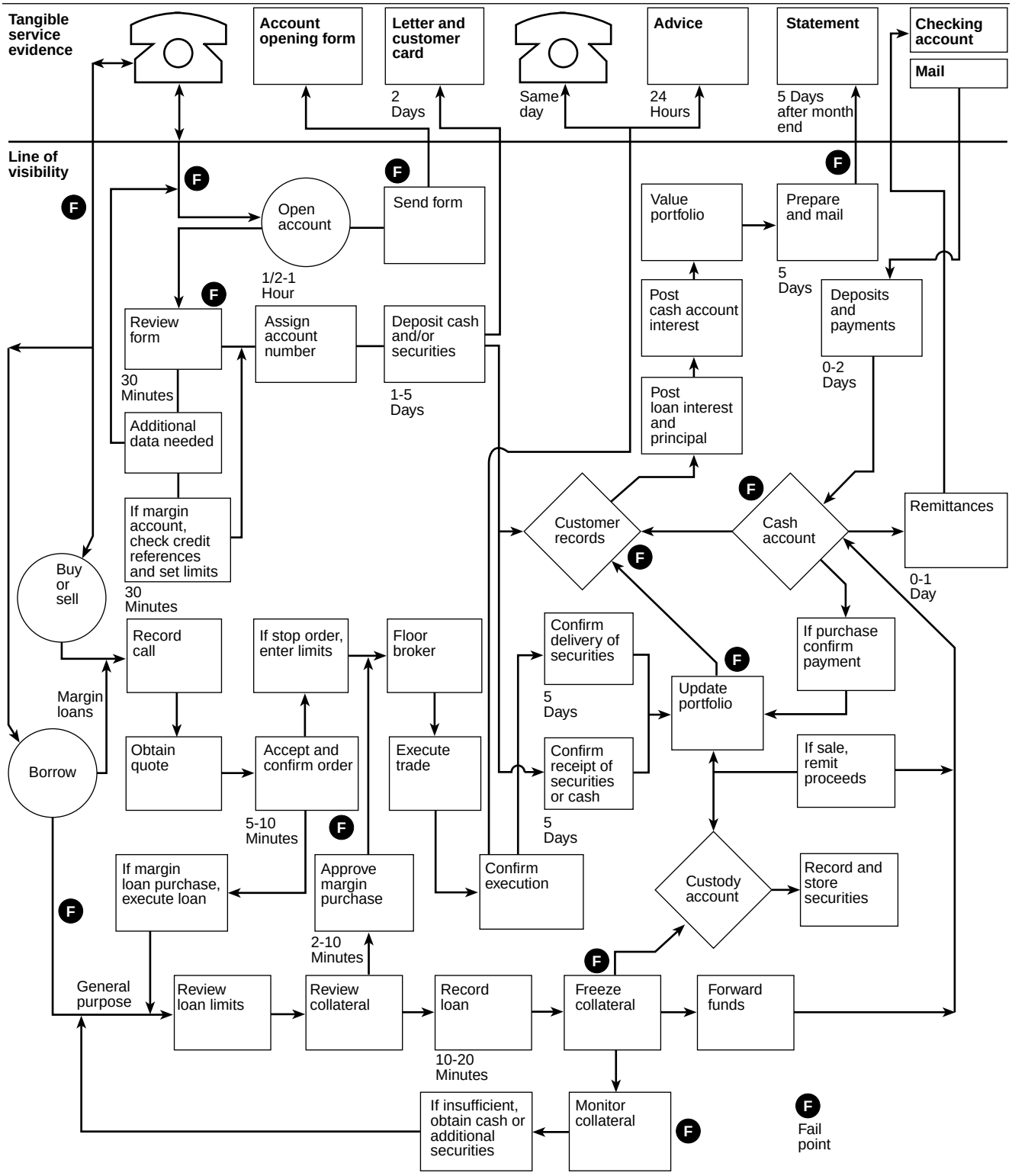


component that is not only critical and difficult to control but also one of the most powerful influences of customer perception, since it provides the only personal contact. To deal with this potential fail point, management decided to script dialogues for various situations, to train staff thoroughly in communication and response techniques, to establish procedures making certain that calls never went unanswered, and to ensure accuracy by logging, recording, and confirming all customer instructions. While the blueprint doesn't show these processes, the system designer has diagrammed and controlled each one.

The design shows execution time standards that can be easily monitored and quantified. They allow the measurement of capacity and productivity through volume and throughput relationships. In telephone communication, for example, the brokerage set a broad time limit for opening accounts (one-half to one hour). Execution standards can be tightened as operating experience increases.

Although the superficial aspects of services may seem the same, the design particulars involve so many alternatives and choices that no two services will have exactly the same design. Services differ from competitor to competitor in the sum of particu-

Exhibit V Blueprint for Discount Brokerage



lars. Individual aspects allow consumers to discriminate between companies offering the same product.

In its complete form, Exhibit V permits the analysis of competitive differences. The designer can then respond to unfavorable comparisons with appropriate changes. As new processes or products are

added, or enhancements made, they can be mapped on the blueprint and analyzed for their impact on operations, profitability, and reliability.

Creating Better Service

A blueprint is more precise than verbal definitions and less subject to misinterpretation. It illustrates the dictum of W. Edwards Deming that workers are never to blame for flaws in a process. Process design is management's responsibility.

A service blueprint allows a company to test its assumptions on paper and thoroughly work out the bugs. A service manager can test a prototype delivery on potential customers and use the feedback to modify the blueprint before testing the procedure again.

A blueprint encourages creativity, preemptive problem solving, and controlled implementation. It can reduce the potential for failure and enhance management's ability to think effectively about new services.

The blueprint principle helps cut down the time and inefficiency of random service development and gives a higher level view of service management prerogatives. The alternative—leaving services to individual talent and managing the pieces rather than the whole—makes a company more vulnerable and creates a service that reacts slowly to market needs and opportunities. As the United States moves to a service economy, companies that gain control of the design and management process will be the companies that survive and prosper.

Verses Written at Bath, in the Year 1748, on Finding the Heel of a Shoe

. . . This pondrous heel of perforated hide
Compact, with pegs indented many a row,
Manly, (for such its mass form bespeaks,)
The weighty tread of some rude peasant clown
Upbore: on this supported oft, he stretch'd,
With uncouth strides, along the furrow'd glebe,
Flatt'ning the stubborn clod, till cruel time,
(What will not, cruel time!) on a wry step,
Sever'd the strict cohesion; when, alas!
He, who could erst, with even, equal pace,
Pursue his destined way with symmetry,
And some proportion form'd, now, on one side,
Curtail'd and maim'd, the sport of vagrant boys,
Cursing his frail supporter, treach'rous prop!
With toilsome steps, and difficult, moves on.

Thus fares it oft with other than the feet
Of humble villager;—the statesman thus,
Up the steep road, where proud ambition treads,
Aspiring, first uninterrupted winds
His prosp'rous way: nor fears miscarriage foul,
While policy prevails, and friends prove true;
But that support soon failing, by him left,
Betray'd, deserted; from his airy height
Head-long he falls; and through the rest of life,
Drags the dull load of disappointment on.

William Cowper