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SERVICE OPERATIONS MANAGEMENT













Service Operations Management

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— PREFACE

About five years ago, based on the textbook used, a student could complete a degree in business administration and hardly be aware that service firms existed. Marketing was concerned with the marketing of *products* in manufacturing and retailing firms. Finance and accounting focused on manufacturing firms. Production management and quantitative methods focused on the production of goods. Currently, more and more texts are giving a nod to services by including brief sections and problems that deal with service situations. Traditional operations management instructors stand firmly behind the credo that manufacturing principles cover service firms almost completely.

A new view of operations management is rapidly emerging. Students see service activities all about them in everyday life but rarely see manufacturing plants. Is it any wonder that with 7 out of 10 American workers employed in service organizations, most students envision careers in services? Is it any wonder they do so when 95 percent of the 25-million jobs created in the United States since 1969 have been in the services, while employment in manufacturing has changed relatively little?

Rather than teach common production principles in a manufacturing setting, it appears more logical today to teach them in a service organization setting. Despite commonalities, we believe that there are enough differences between service operations management and manufacturing management to justify distinctly different courses. For example, could a machine shop manager successfully operate a ski resort, or vice versa? Could an automobile production line manager successfully run an advertising agency, or vice versa?

The characteristics of most service firms differ widely from those of manufacturing firms. Further, a greater variety of organization, operations, and functions exists within the service industry than within the manufacturing industry. Manufacturing can be more nearly rationalized so that, with technological advances, productivity has increased far more in manufacturing than in service firms. A coherent theory for services and greater productivity increases in services are needed. The challenges and the opportunities for schools of business and for their graduates will extend into the future for service organizations.

Since the Harvard group of W. Earl Sasser, R. Paul Olson, and D. Daryl Wyckoff coauthored their ground-breaking book of text, cases, and readings on management of service operations in 1978, the literature on services operations management (SOM) has grown in both the management and functional fields. Several SOM journals have been born, and a small number of other texts have appeared with specialized perspectives of SOM.

Our book is based on a framework of service activities that allows common principles of both manufacturing and service organizations to be observed. Similarities, contrasts, and unique topics in each industry are pointed out so that the widest variety of instructors may feel comfortable with new material. In addition, the text is designed to accommodate most teaching styles and to support either a qualitative or quantitative

approach to the topic. The combination of text, many short cases, and readings make this book suitable for an introductory course. Lengthy cases and a detailed term service project in Chapter 18 provide an opportunity for in-depth analysis for those who desire this approach. For quantitative courses, the language of mathematics is placed in stand alone parts or in supplements to each chapter, with enough depth to make this book good for a rigorous treatment of the subject. The book was developed to meet AACSB requirements for an operations management course.

Although this book has been widely reviewed by eminent authorities in the field, the final selection of material has been ours. Through wide use of such a text, feedback from users of this text, and increased research in service operations management, a sound general theory of service operations management can evolve.

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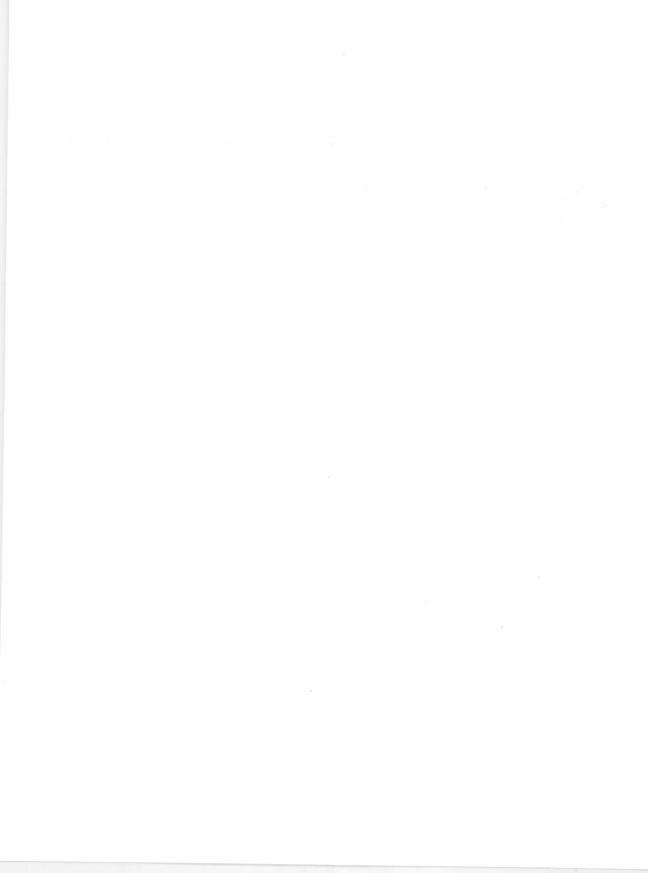
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Introduction



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OUTLINE

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- Opposing Views of a Service Economy
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- Summary
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- Reading 1.1 Japan's Got Us Beat in the Service Department, Too
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INTRODUCTION

For some, it is a hard realization that services are the predominant force in our society, that McDonald's has more employees than U.S. Steel, and that perhaps golden arches, not blast furnaces, symbolize the American economy. For others, services represent the essence of American culture—closeness to the consumer, responsiveness, innovation, dependency on labor, management of small groups of employees, and entrepreneurial opportunities. Whatever your orientation, services are an integral part of our society and deserve careful study.

Good service doesn't just happen by chance; it is not the result of an extraordinary employee who goes out of his or her way to please a particular customer. Good service must be planned and managed, from the design of the service to the delivery of the service, from maintaining efficient operations to ensuring that the quality of the service is both high and consistent.

There must be a strategy for providing service that matches the target market with the strengths of the service company. Decisions in support of the service strategy,

¹ This oft-quoted statement comparing McDonald's to U.S. Steel is attributed to George F. Will, a well-known syndicated columnist.

such as location, layout, capacity, inventory, distribution, and quality assurance, must be in place. The management of technologies and human resources must be effectively addressed. Some of these issues can be resolved by borrowing techniques from the manufacturing sector; others are uniquely service-oriented and require special consideration.

This text covers a wide range of issues in managing service operations. It is designed to provide a more comprehensive, systematic coverage of service operations than "service examples" found in production/operations management texts or narrative expositions on service quality found in management books.

We begin here in Chapter 1 by defining services and exploring the role of services in our society.

WHAT ARE SERVICES?

The material gains of a society are achieved by adding value to natural resources. In advanced societies, there are many institutions which extract raw materials, add value through processing them, and transform intermediate materials and components into finished end products. There are, however, many other institutions which *facilitate* the production and distribution of goods and add value to our personal lives. The outputs of this latter group are called **services**.

Services can be defined as economic activities that produce time, place, form, or psychological utilities. A maid service saves the consumer's *time* from doing household chores himself or herself. Department stores and grocery stores provide many commodities for sale in one convenient *place*. A database service puts together information in a *form* more usable for the manager. A ''night out'' at a restaurant provides *psychological* refreshment in the middle of a busy workweek.

Services also can be defined in contrast to goods. A good is a tangible object that can be created and sold or used later. A service is intangible and perishable. It is created and consumed simultaneously (or nearly simultaneously).² Although these definitions may seem straightforward, the distinction between goods and services is not always clearcut. For example, when we purchase a car, are we purchasing a good or the service of transportation? A television set is a manufactured good, but what use is it without the service of television broadcasting? When we go to a fast-food restaurant, are we buying the service of having our food prepared for us or are we buying goods that happen to be ready-to-eat food items?

In reality, almost all purchases of goods are accompanied by *facilitating services*, and almost every service purchase is accompanied by a *facilitating good*. Thus the key to understanding the difference between goods and services lies in the realization

² Chapter 2 describes the special characteristics of services in more detail.

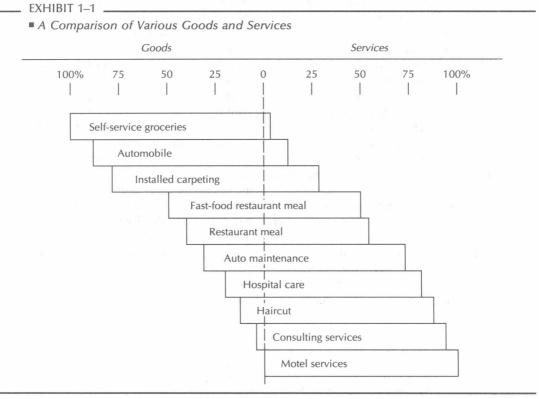
The term *facilitating good* was suggested by John Rathmell in *Marketing in the Service Sector* (Cambridge, Mass.: Winthrop Publishers, 1974). For more discussion of facilitating goods and services, see W. E. Sasser et al., *Management of Service Operations* (Boston: Allyn and Bacon, 1978), Chap. 2.

that these items are not completely distinct, but rather are two poles on a continuum. Exhibit 1–1 shows such a continuum.

Referring to Exhibit 1–1, we would probably classify the first three items as "goods" because of their high material content. There is little service to self-service grocery stores; an automobile is mostly a physical item; and while its installation does require some service, carpet is predominantly a good. The remaining items we would probably classify as "services" because of their high service content, although some physical materials may be received. For instance, restaurants not only give the customer a meal of physical food and drink, but also a place to eat it, chefs to prepare it, waiters to serve it, and an atmosphere in which to dine. Motels are almost pure service, with very little material goods (perhaps matches or a postcard) received by the consumer. Can you identify the goods and services content of the other examples in Exhibit 1–1?

A Service Taxonomy

If it is difficult to distinguish between goods and services, it is equally as difficult to define what constitutes a service firm or a service industry. Even government agencies disagree. An example will illustrate the problem. The *Statistical Abstract of the United*



Source: From Earl W. Sasser, R. P. Olsen, and D. Daryl Wyckoff, *Management of Service Operations*, p. 11. Copyright © 1978 by Allyn and Bacon. Reprinted with permission.