

# **Operations Management in the Hospitality Industry**

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# Operations Management in the Hospitality Industry

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# Preface

Welcome to the first edition of *Operations Management in the Hospitality Industry*. This introductory textbook provides students with fundamental techniques and tools for analyzing and improving operational capabilities within any hospitality organization.

Understanding hospitality operations is not easy. Services are intangible, highly variable, not transportable, and perishable. In addition, hotels, restaurants, and similar experiences involve more customer touchpoints and are significantly less productive than manufacturing sectors – and even other service industries like retail and professional services. As a result, hospitality operations often require specialized analytical frameworks and tools.

Traditionally, hospitality management programs have offered hotel and restaurant operations courses. These courses focus on industry-specific techniques for managing the service operations of a facility (i.e., how a hotel is organized, how to use a restaurant point-of-sale information systems, etc.) instead of incorporating concepts and tools for general operations management (i.e., how to assess and improve quality, how to procure supplies, etc.).

Intense competition in a fast-paced global hospitality scene requires organizations to determine the best, most efficient ways to improve services in terms of cost, quality, and innovation. As the COVID-19 crisis unfolded globally, hospitality organizations across the world additionally proved that risk and crisis readiness are necessary for business continuity and managerial success.

To address these challenges, we perceive that hospitality operations courses are gradually transitioning into – or being supplemented with – more traditional operations management courses, with embedded applications spanning hotels, restaurants, cruise lines, casinos, and other experiential services. We foresee that these courses will become increasingly critical in the curricula of academic hospitality management programs, as well as in operations management education programs that want to offer exploratory courses specific to this exciting industry.

Our book introduces some critical decision areas in which hospitality managers are involved, in chapters written by an assemblage of leading scholars and seasoned professionals – industry experts alike. Fundamental quantitative analytical tools are highlighted to support decision making, as are key theories and frameworks for managerial success. The wide range of pedagogical features will accommodate a variety of teaching and learning styles. Our streamlined approach focuses on key concepts in order to leave room for additional content, such as

case studies, simulations, or other class activities. Further, each chapter of this textbook offers a self-contained view of a specific aspect of hospitality operations management, providing the greatest instructional flexibility.

We present this book and wish the reader – students, instructors, and industry practitioners alike – success with operations management in the hospitality industry.

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## Chapter 1

# Understanding Service Operations Strategy

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### Abstract

This chapter covers four main concepts: (a) providing an understanding of service; (b) organizing hospitality decisions and processes; (c) defining strategic service visions; and (d) dissecting operations strategies for hospitality services. In the first section, the definition of service, the five service dimensions, and the service package are covered. In the second section, hospitality decisions and processes are framed by service concepts and the service-profit chain. A service concept is the starting point for developing hospitality operations strategies, while the service-profit chain explains the link from customer satisfaction and customer loyalty to a service firm's growth and profitability. In the third section, the strategic service vision is explored. Successful service firms all have a strategic service vision, which includes a set of ideas and actions organized in a systematic way to maximize a firm's performance. In the fourth and final section, the operations strategy for hospitality services is covered. Successful service operations occur when management defines and adheres to a competitive operations strategy.

*Keywords:* Hospitality operations management; operations strategy; service; service decisions; service process; strategic service vision

### Learning Outcomes

After completing this chapter, you should be able to:

1. Classify services to understand common and variable managerial issues across hospitality businesses.
2. Describe a hospitality service using the five dimensions of the service package.

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3. Articulate the service concept for a hospitality organization to develop operations strategies.
4. Explain the service-profit chain for a hospitality organization.
5. Formulate a strategic service vision framework for a hospitality organization.
6. Identify the competitive dimensions of operations strategy for a hospitality organization.

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## Getting Started

The hospitality industry contributes to a significant portion of the service sector, and its growth had been constantly accelerating over the past decade leading to the COVID-19 pandemic. Since 2009, the US hospitality industry developed steadily and total revenues surpassed \$1.6 trillion in 2017, supporting 7.8 million jobs ([National Travel and Tourism Office, 2018](#)). While COVID-19 substantially stunted industry growth, the crisis also illuminated the significance of the industry to national and global economies.

It is important to note at the beginning of this chapter that this book specifically focuses on the hospitality industry in terms of operations management. The hospitality industry extends beyond the most prominent sectors of hotels and restaurants: hospitality broadly includes lodging, food and beverage service, meetings and events facilitation, theme parks and amusements, casino gaming, clubs of several types, and a variety of travel services – air, rail, automotive, and cruising among them. To deliver experiences in any of these sectors, a critical business function is needed: hospitality operations management seeks to profitably coordinate the design, development, and delivery of service experiences. It includes all of the activities, decisions, and responsibilities for business success by utilizing company resources. These resources involve the employees, equipment, technology, and even the customers. Effective operations management can make a real difference for hospitality firms. Overall, hospitality operations management is concerned with understanding customer needs, designing and delivering quality service, managing efficient and effective service processes, producing continuous

service improvements, and meeting company objectives. Excellent hospitality operations management will lead to better services and experiences for customers and staff, which will further the goal of business success. This chapter intends to explain the role of hospitality operations management by first introducing some key concepts, starting with a foundational understanding of services.

## 1. What is “Service”?

### 1.1. Definition of Service

Services are abundantly experienced in daily life, and they occur in an array of styles and outcomes. Services can be provided directly to the customer (e.g., spa treatments) or for the customer (e.g., food deliveries). Services can be delivered by personnel (e.g., luggage delivered to hotel rooms by bellmen) or via technology (e.g., restaurant reservations made online by guests themselves). Generally, a **service** is the action, performance, or process that takes place between a customer and a service provider: a service is the intangible part of the transaction relationship, whereas a product is the tangible component. For example, at Dunkin coffee shops, guests experience the intangible service (e.g., ordering the coffee, interacting with the staff) and receive the tangible, physical product (e.g., a cup of coffee, a doughnut). Likewise, when a guest stays at a hotel, they experience the intangible service (e.g., checking in at the front desk) and engage with a tangible, physical product (e.g., the hotel room they occupy during the visit). Services surround virtually every part of consumers’ lives, and they are especially pronounced in the human-centric hospitality industry.

### 1.2. Dimensions of Services

In his book *Service Science: Concepts, Technology, Management*, Katzan (2008) outlines five dimensions on which services can be classified:

- 1) Service process;
- 2) Service nature;
- 3) Service delivery;
- 4) Service availability; and
- 5) Service demand.

Each of these dimensions offers a spectrum on which businesses can determine and distinguish operations strategies. Collectively, the dimensions help to define the overall service model for a business.

The dimension of **service process** captures the relationships between the labor intensity of a service and how much the service is customized. Schmenner (1986) developed the **service process matrix** (Fig. 1) to visualize the relationships.

The *Y*-axis represents the degree of labor intensity, or the significance of labor costs relative to capital (e.g., equipment, software) costs. The *X*-axis reflects the degree to which each service interaction is customized for the guest. **Service factories** are businesses like airlines or cruise lines that employ heavily standardized processes (often driven by technology) to deliver generic services to many guests.

		Degree of Interaction & Customization	
		Low	High
Degree of Labor Intensity	Low	<p><b><i>Service Factories</i></b></p> <p>Limited-service hotels Airlines Cruise lines Amusement parks Casinos</p>	<p><b><i>Service Shops</i></b></p> <p>Luxury hotels Online travel agencies</p>
	High	<p><b><i>Mass Services</i></b></p> <p>Fast food restaurants Cafeterias Buffets</p>	<p><b><i>Professional Services</i></b></p> <p>Fine dining restaurants Traditional travel agencies Event venues Spas</p>

Fig. 1. The Service Process Matrix. *Source:* Adapted from Schmenner (1986, p. 25). Copyright 1986 by the Sloan Management Review Association.

**Professional services**, like spas or fine dining restaurants, are at the opposite end of the spectrum: these businesses offer highly customized services to guests, and the services require the devotion of significant time by trained professionals in order to create the experiences. **Service shops** may not require as much labor (relative to capital costs), but they still achieve high personalization; think about the way luxury hotels customize the stays of large numbers of guests staying each evening. **Mass services**, finally, offer little customization but still require heavy labor: this is especially common in foodservice, where large volumes of standard food items might need to be prepared for large numbers of guests. The four quadrants of the matrix ultimately represent the four dominant schemes for service processes.

The **service nature** dimension characterizes how a service acts upon an object to achieve a result. A **service object** is the person or thing upon which the service is enacted. The **service result** is the tangible or intangible outcome of the service. The service nature matrix (Fig. 2) maps these dimensions.

In hospitality businesses, it is most common that the service objects are people. Service results, however, can vary between being tangible or intangible. While many services involve tangible items (e.g., printed hotel folios, restaurant menus, dinnerware), it is important to distinguish here that service artifacts or props are not necessarily service results: service results are the outcomes of service, *not* all physical items that help to facilitate a service.

The third dimension is **service delivery**. This dimension, as represented by the service delivery matrix (Fig. 3), relates to the timing of service delivery. In one sense, **service scheduling** can either be scheduled or unscheduled: guests might need to make reservations for a fine dining restaurant, while they can go unannounced

		Service Object	
		People	Things
Service Result	Tangible	Restaurants Spas	Laundry services Luggage handling services
	Intangible	Hotels Amusement parks	Travel insurance services Global distribution systems

Fig. 2. The Service Nature Matrix. *Source:* Adapted from Katzan (2008, p. 19). Copyright 2008 by the Harry Katzan.

to a fast-food restaurant at any time. The service delivery matrix also accounts for the **service mode**: does service occur in specific, fixed increments or does it occur continuously?

The fourth dimension is **service availability**. This dimension relates to the service setting and characterizes the **service site** where the service occurs (whether it happens in one specific place or is available in multiple places), and whether the service guest or service provider (or neither) need to exert effort to reach the service setting – a process referred to as **service execution**. The service availability matrix (Fig. 4) frames this dimension.

The evolution of digital services and mobile technology is increasing the instances of service being executed without travel: it is easy for a guest to book a

		Service Scheduling	
		Formal	Informal
Service Mode	Continuous	Hotels Cruise lines	Fast food restaurants Amusement parks
	Discrete	Fine dining restaurants	Traditional travel agencies

Fig. 3. The Service Delivery Matrix. *Source:* Adapted from Katzan (2008, p. 20). Copyright 2008 by the Harry Katzan.

		Service Site	
		Single	Multiple
Service Execution	Guest Travels	Destination resorts	Fast food restaurants
	Nobody Travels	Virtual meeting services	Online travel agencies
	Provider Travels	In-home spa services	Food delivery services

Fig. 4. The Service Availability Matrix. *Source:* Adapted from Katzan (2008, p. 21). Copyright 2008 by the Harry Katzan.

vacation with a travel agency by phone or online, for instance. It is also common in the hospitality industry for multiple establishments to share the same brand, especially with the franchise operating model common for hotels and restaurants.

The final dimension considers **service demand**. As the service demand matrix (Fig. 5) shows, service demand is a factor of customer demand for a service and the **service capacity** with which the service provider can accommodate that demand. Attendance at amusement parks can vary widely due to factors like weather and holidays, but parks are so large that they can usually accommodate

		Demand Fluctuation	
		Wide	Narrow
Service Capacity	Flexible	Amusement parks Casinos	Travel agencies
	Inflexible	Hotels Cruise lines	Fast-food restaurants

Fig. 5. The Service Demand Matrix. *Source:* Adapted from Katzan (2008, p. 22). Copyright 2008 by the Harry Katzan.

peak demand without major delays in service. Hotels, on the other hand, have much more fixed capacities of rooms that may not satisfy full demand for space; revenue management strategies help to optimize hotels' income and occupancy levels. Fast-food restaurants may have fairly consistent demand throughout any given day, but it is common for guests to wait because demand exceeds capacity for food production. Service demand, in a sense, is the dimension of service strategy relating to the pure economics of supply and demand.

Taken together, these five dimensions can help scope the operating model and strategy of a business. Managers can evaluate each dimension when developing an operating model, which will govern how their services and products will be produced and consumed in order to accomplish the service vision and bring the service concept to life.

### 1.3. The Service Package

The dimensions of services represent, in some respects, the conditions by which a service exists – how and when it is brought into existence, and for and by whom. When looking at the service itself, a concept called the **service package** can be used to assess the various components that are bundled together to form what is delivered to the guest. According to [Fitzsimmons and Fitzsimmons \(2004\)](#), there are five components to the service package:

- 1) **Supporting facilities:** Services usually require a combination of location, equipment, and technology in order to be performed. A hotel, for instance, needs to be built, it should be appointed with interior design, it should possess some sensory ambience (music, lighting, and other esthetic elements), and it requires supporting equipment (computers for the front office, dishware for the restaurants, etc.). Location, architecture and decoration, layout, and equipment are also elements of supporting facilities.
- 2) **Facilitating goods:** Many services require a good to be transformed or consumed in the service process. Consider a restaurant experience, in which food and beverages are tangible goods served to guests in the course of a meal. Note that not all tangible items, however, are facilitating good – plates, tables, chairs, etc. are supporting facilities, because they are part of the service provider's infrastructure and are *not* consumed in the process of facilitating the service. If the customer brings his or her own supplies to a service, such as a golfer bringing clubs to a course, those supplies are considered facilitating goods even if they are not consumed by the end of the service. Facilitating goods can be evaluated along several dimensions, such as selection (e.g., the variety of items on a restaurant menu), consistency (e.g., whether the plating of a menu item is executed in a consistent way each time it is served), and quantity (e.g., how large or small the portioning of a menu item is).
- 3) **Service information:** From the perspective of the service provider, information consists of knowledge from and about the customer that can be used to deliver the service. The Ritz-Carlton brand of hotels notoriously captures details about guest preferences to personalize their stays. Uber uses

customers' cellular location data to determine where to pick up and drop off passengers.

- 4) **Explicit services:** This component of services is an obvious characteristic of the process or outcome. A spa guest will feel muscle relaxation following a massage treatment, for instance. When dinner is presented in a restaurant, the guest may appreciate the aroma of the food. Explicit services also have frictional dynamics: guests may have to queue at a hotel until a clean room is ready for check-in, or they may be presented with an available room immediately upon arrival; the crew on a cruise ship may know and clearly communicate the process for disembarkation, or an untrained crew might cause confusion among passengers when providing unclear instruction. Explicit services are direct consequences of the service as perceived by the guest.
- 5) **Implicit services:** This component is less obvious to guests, but it still results in indirect emotional effects. The luxurious atmosphere and architectural design of a St Regis resort may inspire a guest, or the convenience of keyless hotel room entry at a Hilton hotel may allow a guest to conveniently proceed with other business rather than hassle with a plastic key card. Factors like server attitude, ambience and atmosphere, waiting, status, sense of well-being, privacy and security, and convenience are examples of implicit services.

## 2. Hospitality Decisions and Processes

### 2.1. Service Concepting

A **service concept** identifies the “what” and the “how” of the service nature. It is the way in which service firms want their customers, staff, and shareholders to perceive the service. In the hospitality industry, service providers need to create a clear service concept so that the customers know exactly what they are buying or receiving. Additionally, the staff needs to understand precisely what they are selling and how they are creating products and services. The service concept is the starting point of developing operations strategies for hospitality firms. It is used to articulate the business nature, to link different organizational functions, and to challenge the status quo. Thus, a detailed service concept helps firms to strategically manage their operations and develop competitive advantages. A service concept should include the following components suggested by [Johnston, Clark, and Shulver \(2012\)](#). See [Fig. 6](#) for an example of a service concept, depicting the coffeehouse chain Starbucks.

- 1) The **organizing idea** underscores the core service that the customers are purchasing. Thus, a service firm must focus resource allocation and service design on the organizing idea. For instance, a hotel's organizing idea may be “providing a home-like environment.” This would require the hotel to focus on creating rooms for their customers to feel like they are at home.
- 2) The **service provided** reflects the entire service process and outcomes designed by the operation. For example, checking into the “home-like environment” hotel room may be pleasant due to the presence of helpful staff. Other than