

Chapter 9

Service Processes

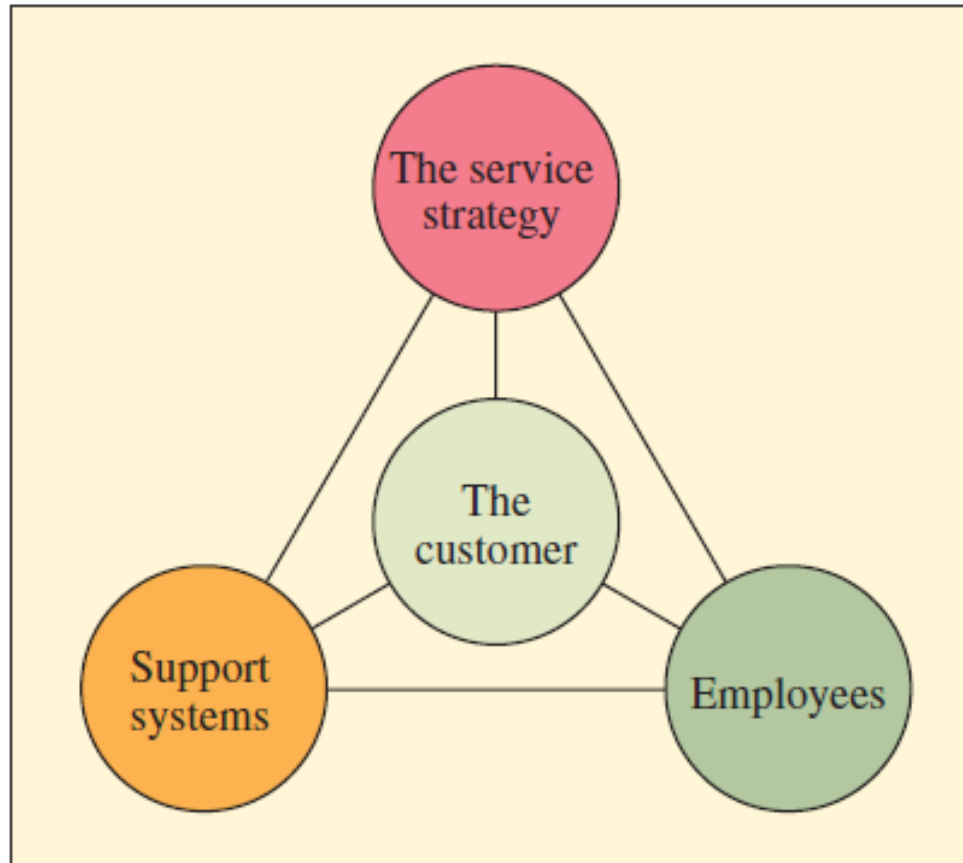
Learning Objectives

- 9-1: Understand the characteristics of service processes
- 9-2: Explain how service systems are organized.
- 9-3: Analyze simple service systems.
- 9-4: Contrast different service designs.

The Nature of Services

- The customer is the focal point of all decisions and actions
- The organization exists to serve the customer
- Operations is responsible for service systems
- Operations is also responsible for managing the work of the service workforce

Exhibit 9.1 The Service Triangle



Service Package (1 of 2)

- Supporting facility
 - The physical resources that must be in place before a service can be offered
- Facilitating goods
 - The material purchased by the buyer or the items provided to the customer
- Information
 - Data provided by the customer

Service Package (2 of 2)

- Explicit services
 - Benefits that are observable by the senses
- Implicit services
 - Psychological benefits the customer may sense only vaguely

An Operational Classification of Services (1 of 2)

- **Customer contact:** the physical presence of the customer in the system
 - **Extent of contact:** the percentage of time the customer must be in the system relative to service time
 - Services with a high degree of customer contact are more difficult to control
- **Creation of the service:** the work process involved in providing the service itself

An Operational Classification of Services (2 of 2)

- The greater the percentage of contact time between the service system and the customer, the greater the degree of interaction between the two during the production process

Exhibit 9.2 Major Differences between High- and Low-Contact Systems in a Bank

(1 of 2)

Design Decision	High-Contact System (A Branch Office)	Low-Contact System (A Check Processing Center)
Facility location	Operations must be near the customer.	Operations may be placed near supply, transport, or labor.
Facility layout	The facility should accommodate the customer's physical and psychological needs and expectations.	The facility should focus on production efficiency.
Product design	The environment, as well as the physical product, defines the nature of the service.	The customer is not in the service environment, so the product can be defined by fewer attributes.
Process design	Stages of production process have a direct, immediate effect on the customer.	The customer is not involved in the majority of processing steps.
Scheduling	The customer is in the production schedule and must be accommodated.	The customer is concerned mainly with completion dates.

Exhibit 9.2 Major Differences between High- and Low-Contact Systems in a Bank

(2 of 2)

Design Decision	High-Contact System (A Branch Office)	Low-Contact System (A Check Processing Center)
Production planning	Orders cannot be stored, so smoothing production flow will result in loss of business.	Both backlogging and production smoothing are possible.
Worker skills	The direct workforce constitutes a major part of the service product and so must be able to interact well with the public.	The direct workforce need only have technical skills.
Quality control	Quality standards are often in the eye of the beholder and, thus, are variable.	Quality standards are generally measurable and, thus, fixed.
Time standards	Service time depends on customer needs, so time standards are inherently loose.	Work is performed on customer surrogates (such as forms), so time standards can be tight.
Wage payment	Variable output requires time-based wage systems.	“Fixable” output permits output-based wage systems.
Capacity planning	To avoid lost sales, capacity must be set to match peak demand.	

Designing Service Organizations

- Cannot inventory services
 - Must meet demand as it arises
- Service capacity is a dominant issue
 - “What capacity should I aim for?”
- Marketing can adjust demand
- Cannot separate the operations management function from marketing in services
- Waiting lines can also help with capacity

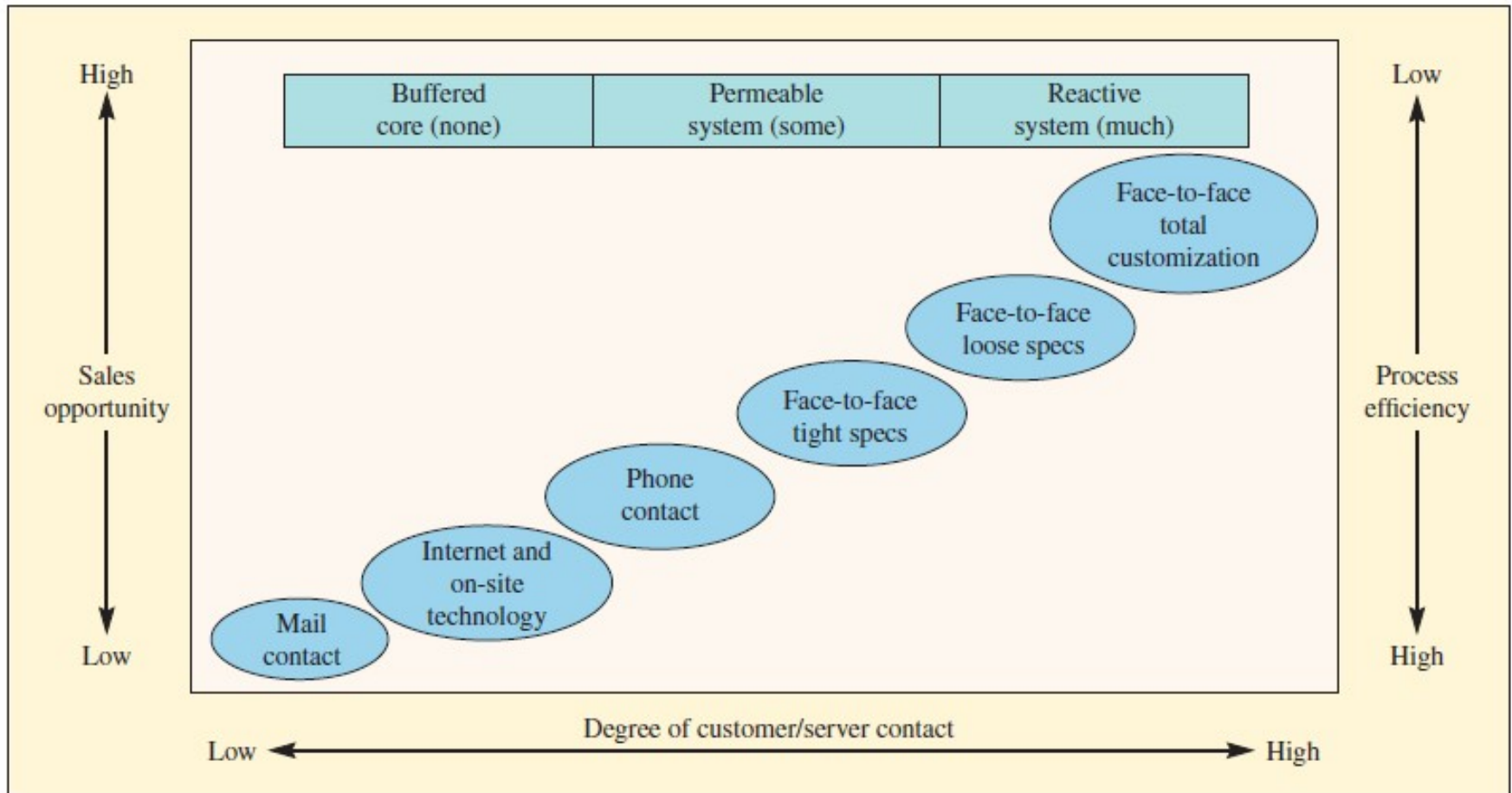
How Service Design Is Different from Product Design?

1. The process and the product must be developed simultaneously
 - The process is the product
2. A service operation lacks the legal protection commonly available to products
3. The service package constitutes the major output of the development process
4. Many parts of the service package are defined by the training individuals receive
5. Many service organizations can change their service offerings virtually overnight

Structuring the Service Encounter: Service-System Design Matrix

- Service encounters can be configured in a number of different ways
 1. Mail contact
 2. Internet and on-site technology
 3. Phone contact
 4. Face-to-face tight specs
 5. Face-to-face loose specs
 6. Face-to-face total customization
- Production efficiency decreases with more customer contact
- Low contact allows the system to work more efficiently

Exhibit 9.3 Service-System Design Matrix



Characteristics Relative to the Degree of Customer/Service Contact

Degree of customer/server contact

Low

High

Worker requirements	Clerical skills	Helping skills	Verbal skills	Procedural skills	Trade skills	Diagnostic skills
Focus of operations	Paper handling	Demand management	Scripting calls	Flow control	Capacity management	Client mix
Technological innovations	Office automation	Routing methods	Computer databases	Electronic aids	Self-serve	Client/worker teams

Strategic Uses of the Matrix

1. Enabling systematic integration of operations and marketing strategy
2. Clarifying exactly which combination of service delivery the firm is providing
3. Permitting comparison of how other firms deliver specific services
4. Indicating life cycle changes as the firm grows

Virtual Service: The New Role of the Customer

- Customers no longer just interact with the business
- **Pure virtual customer contact:** customers interact in an open environment
 - eBay
 - SecondLife
- **Mixed virtual and actual customer contact:** customers interact with one another in a server-moderated environment
 - YouTube
 - Wikipedia

Managing Customer-Introduced Variability

- How should services accommodate the variation introduced by the customer?
- Standard approach is to treat this as a trade-off between cost and quality
 - More accommodation → more cost
 - Less accommodation → less satisfaction
- Standard approach may overlook ways to accommodate customer

Five Types of Variability (1 of 2)

- Arrival variability
 - Customers arriving at times when there are not enough service providers
- Request variability
 - Travelers requesting a room with a view
- Capability variability
 - A patient being unable to explain symptoms to doctor

Five Types of Variability (2 of 2)

- Effort variability
 - Shoppers not putting up carts
- Subjective preference variability
 - Interpreting service action differently

Exhibit 9.4 Strategies for Managing Customer-Introduced Variability (1 of 3)

	Classic Accommodation	Low-Cost Accommodation	Classic Reduction	Uncompromised Reduction
Arrival rate variability	Make sure plenty of employees are on hand	- Hire lower-cost labor - Automate tasks - Outsource customer contact - Create self-service options	- Require reservations - Provide off-peak pricing - Limit service availability	Create complementary demand to smooth arrivals without requiring customers to change their behavior
Variability in the services requested by the customers	- Make sure many employees with specialized skills are on hand - Train employees to handle many kinds of requests	- Hire lower-cost specialized labor - Automate tasks - Create self-service options	- Require customers to make reservations for specific types of service - Persuade customers to compromise their requests - Limit service breadth	- Limit service breadth - Target customers on the basis of their requests

Exhibit 9.4 Strategies for Managing Customer-Introduced Variability (2 of 3)

	Classic Accommodation	Low-Cost Accommodation	Classic Reduction	Uncompromised Reduction
Variability in customer capability	• Make sure employees are on hand who can adapt customers' varied skill levels • Do work for customers	• Hire lower-cost labor. • Create self-service options that require no special skills	• Require customers to increase their level of capability before they use the service	• Target customers on the basis of their capability
Variability in the effort customers are willing to expend	• Make sure employees are on hand who can compensate for customers' lack of effort • Do work for customers	• Hire lower-cost labor • Create self-service options with extensive automation	• Use reward and penalties to get customers to increase their effort	• Target customers on the basis of motivation • Use a normative approach to get customers to increase their effort

Exhibit 9.4 Strategies for Managing Customer-Introduced Variability (3 of 3)

	Classic Accommodation	Low-Cost Accommodation	Classic Reduction	Uncompromised Reduction
Variability in customer preferences and expectations	• Make sure employees are on hand who can diagnose differences in expectations and adapt accordingly	• Create self-service options that permit customization	• Persuade customers to adjust their expectations to match the value proposition	• Target customers on the basis of their subjective preferences

Applying Behavioral Science to Service Encounters

1. The front-end and back-end of the encounter are not created equal
2. Segment the pleasure, combine the pain
3. Let the customer control the process
4. Pay attention to norms and rituals
5. People are easier to blame than systems
6. Let the punishment fit the crime in service recovery

Service Guarantees as Design Drivers

1. Any guarantee is better than no guarantee
2. Involve the customer as well as employees in the design
3. Avoid complexity or legalistic language
4. Do not quibble or wriggle when a customer invokes a guarantee
5. Make it clear that you are happy for customers to invoke the guarantee

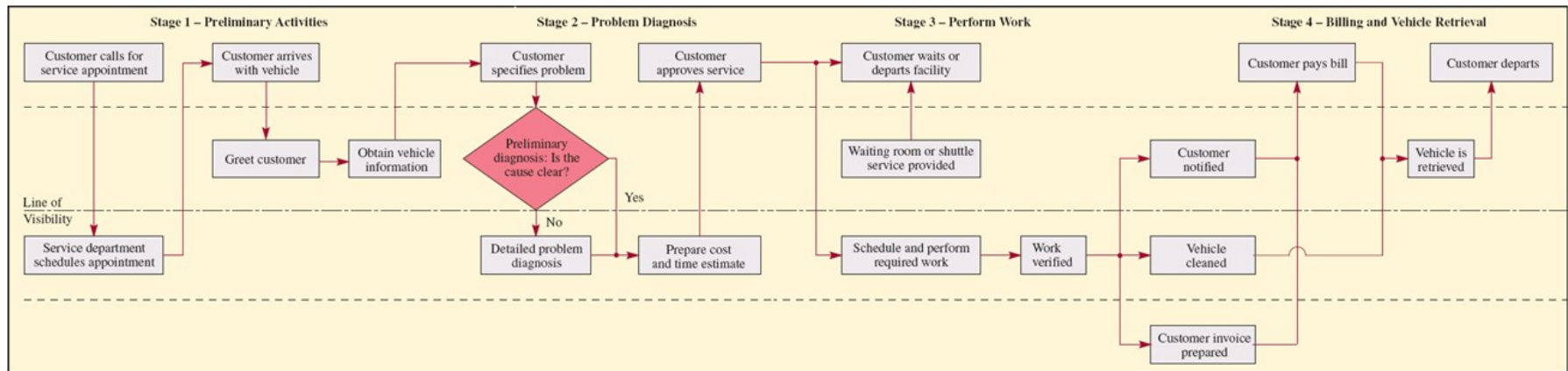
Service Blueprinting and Fail-Safing

- The standard tool for service process design is the flowchart
 - May be called a service blueprint
- A unique feature is the distinction between high customer contact aspects of the service and those activities the customer does not see
 - Made by a “line of visibility”

Service Fail-Safing Poka-Yokes (A Proactive Approach)

- **Poka-yokes:** procedures that block a mistake from becoming a service defect
 - Common in factories
- Many applications in services
 - Warning methods
 - Physical or visual contact methods
 - Three T's
 1. Task to be done
 2. Treatment accorded to the customer
 3. Tangible features of the service
- Must often fail-safe actions of the customer as well as the service workers

Exhibit 9.5 Fail-Safing an Automotive Service Operation



Three Contrasting Service Designs

- The production line approach
 - McDonald's
 - Service delivery is treated much like manufacturing
- The self-service approach
 - ATM machines
 - Customer takes a greater role in the production of the service
- The personal attention approach
 - Ritz-Carlton Hotel Company

Seven Characteristics of a Well-Designed Service System (1 of 2)

1. Each element of the service system is consistent with the operating focus of the firm
2. It is user-friendly
3. It is robust
4. It is structured so that consistent performance by its people and systems is easily maintained

Seven Characteristics of a Well-Designed Service System (2 of 2)

- 5. It provides effective links between the back office and the front office
- 6. It manages evidence of service quality so that customers see the value of service provided
- 7. It is cost-effective

Summary (1 of 2)

- A service package is the bundle of goods and services that is provided to the customer in some environment
- Services can be classified according to the degree of “contact” of the customer in the system
 - In some cases, the customer need not be present at all
- Service systems differ from manufacturing systems in a number of significant ways

Summary (2 of 2)

- The service-system design matrix explores the trade-offs between sales opportunity, efficiency, and characteristics of workers
- A challenge in managing service systems is the great variability introduced by a customer
- Service guarantees are designed to provide a customer with a clear idea of what to expect from a service
- Service blueprints are a flowchart tool that places special emphasis on identifying the high/low customer contact

Practice Exam (1 of 3)

1. Service systems can generally be categorized according to this characteristic that relates to the customer
2. A service triangle consists of these four features
3. This framework relates to the customer service system encounter

Practice Exam (2 of 3)

- 4. This is the key feature that distinguishes a service blueprint from a normal flowchart
- 5. Having your luggage arrive on time when you land at an airport is what type of service in the service package
- 6. SecondLife would be this type of virtual service
- 7. These procedures are done to make a system mistake-proof

Practice Exam (3 of 3)

- 8. These are the three steps of service at Nordstrom
- 9. What are the four strategies for managing customer-induced variability
- 10. The front end and the back end of a service encounter are referred to as what

End of Presentation