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ITIL® Service Lifecycle: Service Design

Exercise Guide
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Exercise Guide

Exercise 1-1: Define Inputs and Outputs of the Service Design Lifecycle Stage

Overview

The purpose of this exercise is to review the manner in which the service operation lifecycle stage supports (and is supported by) the other service lifecycle stages. In this exercise, you will list and describe inputs and outputs of the service operation stage of the service lifecycle.

Duration

- **Exercise:** 20 minutes
- **Discussion:** 10 minutes

Instructions

Complete the following worksheet. For each lifecycle stage, list and describe three to four inputs that the lifecycle stage provides to the teams performing operation activities. Additionally, list and describe three to four outputs from service operation activities that are provided back to each other lifecycle stage.

	Service Design Inputs from This Lifecycle Stage	Service Design Outputs to This Lifecycle Stage
Strategy		
Transition		
Operation		
CSI		

Exercise 2-1: Identify and Define the Five Major Aspects of Service Design

Overview

Effective and holistic service design requires a consideration of the five major aspects of service design. These five major aspects must be considered together, because a change that affects one can have a cascading impact upon other aspects of design, along with overall service quality and cost.

Duration

- **Exercise:** 30 minutes
- **Discussion:** 10 minutes

Instructions

Complete the following exercise worksheet. Identify and define in your own words the five major aspects of design.

Aspect of Design	Definition

Exercise 5-1: Analyze and Apply Approaches to Structuring SLAs

Overview

There are many approaches to structuring SLAs. The approach that is chosen will result in different numbers of SLAs being created, which will have a downstream impact on the number of reports and reviews that the service provider performs on an ongoing basis.

In this exercise, you will explore how the different approaches to structuring SLAs can be applied to a specific scenario.

Duration

- **Exercise:** 45 minutes
- **Discussion:** 15 minutes

Instructions

Read the following scenario and complete the associated exercise activities as directed by your instructor. Specific instructions are provided with each activity.

Scenario

Marquis Stone is a large quarry located in the northeastern United States with access to unique granite that is in high demand across a number of boutique construction companies. The company's granite has been used in the lobbies of world-class hotels and has recently become fashionable within the kitchens of the rich and famous.

As Marquis Stone has entered new markets, there has been pressure on the internal service provider to deliver and manage services that support these new markets and sales channels. Previously, a "we need this yesterday" attitude has forced services into production environments without adequate design and transition planning, resulting in inconsistent levels of service and numerous major incidents that could have been prevented with better service level requirements being gathered up front. Six months ago, the service provider implemented service level management as part of a larger program to ensure more holistic definition of service requirements and SLAs were negotiated for the last two services that were launched.

The business is appreciating the documented and measurable targets and finding value in the ongoing performance reporting and service reviews that service level management performs and has now begun to ask when SLAs can be produced for the existing catalog of services. The Director of IT has asked you to outline some approaches for structuring these SLAs to guide the subsequent work of negotiating and agreeing on the related service level targets.

The customer base for Marquis Stone includes internal and external customers. Historically, the service provider has focused on its internal customers, which include the following departments:

- Sales and Marketing
- Finance
- Human Resources
- Field Operations
- Mining Operations
- Design and Build

- Shipping and Fulfillment
- Installations
- Customer Support

In addition, the service provider has begun offering two new services, OrderTRAK and VirtualShowcase, which are delivered directly to three different external customers of Marquis Stone.

The service provider has maintained a service catalog and has defined the following customer-facing services in operation:

- Twenty-eight various common services that are used throughout its internal customer base (including such services as desktop publishing, e-mail/messaging, voice/telephone, and Internet services)
- A company Web site
- MobileWorkforce, which manages the external staff activities from pre-sales through installation
- OrderTRAK, which provides order status tracking for customers and internal users
- VirtualShowcase, which provides a catalog of cutting-edge granite use-cases as well as the functionality to customize these designs to the needs of specific customers
- MarquisSupport, which provides contact center services to the customer support department

Activity 5-1.1

Define each of the following SLA structures:

- Service-based SLAs
- Customer-based SLAs
- Multi-level SLAs

Activity 5-1.2

Using the service-based SLA approach, how many SLAs would be created for the service provider described in the Marquis Stone scenario?

Activity 5-1.3

Using the customer-based SLA approach, how many SLAs would be created for the service provider described in the Marquis Stone scenario?

Activity 5-1.4

Identify possible advantages and disadvantages of the service-based and customer-based structures.

	Advantages	Disadvantages
Service-based SLAs		
Customer-based SLAs		

Activity 5-1.5

Answer the following questions related to the multi-level SLA structure:

Question 1: How might the multi-level SLA structure impact the number of SLAs that would be created?

Question 2: Are there any potential advantages and disadvantages to the multi-level SLA approach as compared to the service-based and customer-based structures?

Exercise 6-1: Identify Different Supplier Relationships and the Impact on their Corresponding Contracts

Overview

The nature of an agreement between service provider and supplier depends on the relationship type and the risks involved. A pre-agreement risk assessment is important to identify potential issues. A comprehensive agreement can help minimize risks. A flexible agreement can help minimize the amount of renegotiation that will be required. ITIL^{®1} provides basic and extended definitions around basic external agreements and formal contracts where the risks and costs are higher and the supplier's contribution to services is greater.

In this exercise, you will describe customized and standardized services and provide examples of each.

Duration

- **Exercise:** 20 minutes
- **Discussion:** 10 minutes

Instructions

Complete the following exercise activities as directed by your instructor. Specific instructions are provided with each activity.

Activity 6-1.1

Provide a description of standardized and customized services.

Standardized services:

Customized services:

Activity 6-1.2

Based on your own experience or environment, provide two examples of each service type defined in activity 6-1.1.

Standardized service examples:

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Customized service examples:

Activity 6-1.3

List the elements of the contract or agreement that would be appropriate with suppliers providing standardized and customized services.

	Standardized Services	Customized Services
Agreement/contract elements likely to be included:		
Agreement/contract elements that may also be required:		

Exercise 9-1: Identify and Use IT Service Continuity Management Recovery Options

Overview

In this exercise, you will identify and describe the recovery options discussed by ITIL as part of the IT service continuity management process. Following that, based on a scenario, you will identify which recovery options should be used for a set of services.

Duration

- Exercise: 30 minutes

Instructions

Complete the following exercise activities as directed by your instructor. Specific instructions are provided with each activity.

Activity 9-1.1

Using the Recovery Option Worksheet, specify the characteristics of the various recovery options discussed by ITIL.

Recovery Option Worksheet

Recovery Option	Description
Manual workarounds	
Reciprocal arrangements	
Gradual recovery	
Intermediate recovery	
Fast recovery	
Immediate recovery	

Activity 9-1.2

Read the following scenario. Based on the information in the scenario, identify the appropriate mix of recovery options for the services discussed.

Scenario

PLUSCo is a large chain retail store specializing in general merchandising. PLUSCo has consistently grown over the last 20 years, and now has a presence in all 50 US states. PLUSCo has an internal shared services IT department that provides services throughout the organization. Given the size of PLUSCo's organization, the annual budget for IT is a significant part of corporate expenses. The IT organization is always looking for ways to reduce costs while continuing to provide high-quality services throughout the enterprise.

One area where PLUSCo can likely save money is by clearly defining continuity recovery options for services based on the requirements of the business. The culture at PLUSCo dictates that all IT services require immediate recovery; however, as the organization has grown, it has found that offering immediate recovery for all IT services is neither realistic nor affordable.

The main services offered by PLUSCo include the following:

- **Service desk:** PLUSCo provides general request fulfillment and incident management activities for the whole organization. Given that some stores and business units are open 24 hours per day, 7 days per week, the service desk is required to maintain a 24/7 presence. In other words, the business can tolerate no downtime for the service desk. Currently the service desk is dispersed in two locations; one in Alabama and the other in California.
- **Mainframe payroll:** PLUSCo's payroll system is a legacy mainframe application that works well and is low cost. There are currently no plans to migrate to a different platform. PLUSCo runs weekly payroll batch cycles. Due to state and federal regulations, paying employees is critical. The mainframe payroll application must be available while payroll cycles are being run and during normal east coast business hours daily.
- **Financial system:** PLUSCo uses a financial management system to handle accounts receivable and accounts payable. Suppliers depend on this system to submit invoices and get paid by PLUSCo, and in some cases there are penalties when suppliers are not paid according to the terms of the contract.
- **Point-of-sale system:** Given that PLUSCo is a retail operation, it has an extensive point-of-sale system that is used to process customer transactions in its stores. Additionally, the point-of-sale system provides an interface for prices and specials to be updated and new configurations to be released quickly to stores.

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Which of the following answer tables provides the best mix of recovery options for PLUSCo's systems?

A)

	Manual	Immediate	Fast	Intermediate	Gradual
Service desk		X			X
Mainframe payroll	X				
Financial system	X				
Point-of-sale system		X			

B)

	Manual	Immediate	Fast	Intermediate	Gradual
Service desk	X	X			
Mainframe payroll					X
Financial system					X
Point-of-sale system	X	X			

C)

	Manual	Immediate	Fast	Intermediate	Gradual
Service desk	X	X			
Mainframe payroll			X		
Financial system				X	
Point-of-sale system		X			

D)

	Manual	Immediate	Fast	Intermediate	Gradual
Service desk		X			
Mainframe payroll			X		
Financial system				X	
Point-of-sale system	X	X			

Exercise 10-1: Identify the Objectives of an Information Security Management System

Overview

The information security management information system provides a basis for a cost-effective security management program.

Duration

- **Exercise:** 10 minutes
- **Discussion:** 20 minutes

Instructions

Identify and discuss the objectives of each of the elements on the Information Security Management Framework Worksheet.

Information Security Management Framework Worksheet

Control:	
Plan:	
Implement:	
Evaluate:	
Maintain:	



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