ITIL 4 Management Practices: Incident, Problem, Service Request & Service Desk - Detailed Notes

1. Incident Management

1.1 Purpose

To minimize the negative impact of incidents by restoring normal service operation as quickly as possible

1.2 Key Term: Incident

Definition: An unplanned interruption to a service or a reduction in the quality of a service

1.3 Key Processes and Guidance

- **Incident Categorization**: Design for different types including:
- Major incidents
- Information security incidents
- Varying impact levels
- **Prioritization**: Resolve higher business impact incidents first
- **Target Resolution Times**: Must be agreed, documented and communicated
- **Linking**: Connect incidents to CIs, changes, problems, known errors and knowledge

1.4 Incident Management Tools

Modern tools should provide: - Automated matching of incidents to related incidents, problems or known errors - Intelligent analysis of incident data - Recommendations for future incidents - Collaboration capabilities for effective teamwork

1.5 Incident Types and Resolution Paths

```mermaid graph TD A[Incident Occurs] --> B{Incident Type} B --> C[Type 1: Self-help resolution] B --> D[Type 2: Service desk resolution] B --> E[Type 3: Escalated to support team] B --> F[Type 4: Escalated to suppliers/partners] B --> G[Type 5: Complex/major incidents] B --> H[Type 6: Disaster recovery situations]

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G --> I[Swarming technique]
I --> J[Temporary collaboration team]
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1.6 Collaboration in Incident Management

- **Swarming**: Multiple stakeholders work together initially until the right resolver is identified
- **Third-party Support**: Requires aligned support agreements for external components
- **Information Sharing**: Tools should facilitate sharing of symptoms, actions, affected CIs

1.7 Service Value Chain Contribution

- **High Contribution**: Deliver & support
- **Medium Contribution**: Improve
- **Low Contribution**: Plan, Engage, Design & transition, Obtain/ build

2. Problem Management

2.1 Purpose

To reduce the likelihood and impact of incidents by identifying actual and potential causes of incidents and managing workarounds and known errors

2.2 Key Terms

Term	Definition
Problem	A cause, or potential cause, of one or more incidents
Known Error	A problem that has been analysed but has not been resolved
Workaround	A solution that reduces or eliminates the impact of an incident or problem for which a full resolution is not yet available

2.3 Problem Management Phases

2.3.1 Problem Identification

- Trend analysis of incident records
- Detection of duplicate and recurring issues
- Identification during major incident management
- Analysis of information from suppliers and partners
- Input from internal teams (developers, testers, projects)

2.3.2 Problem Control

- Problem analysis
- Documenting workarounds
- Known error management

2.3.3 Error Control

- Manage known errors
- Identify potential permanent solutions
- Regular re-assessment of known errors
- Impact assessment on customers
- Evaluation of resolution availability and cost

2.4 Interfaces with Other Practices

- Risk management
- Knowledge management
- Change enablement
- Continual improvement

2.5 Service Value Chain Contribution

- **High Contribution**: Improve
- **Medium Contribution**: Design & transition, Deliver & support
- **Low Contribution**: Plan, Engage, Obtain/build

3. Service Request Management

3.1 Purpose

To support the agreed quality of a service by handling all predefined, user-initiated service requests in an effective and user-friendly manner

3.2 Key Term: Service Request

Definition: A request from a user or user's authorized representative that initiates a service action agreed as a normal part of service delivery

3.3 Scope and Examples

Service requests may include: - Service delivery actions - Information provision - Resource or service provision - Access to resources or services - Feedback, compliments, and complaints

3.4 Request Fulfillment Guidelines

1. **Standardization**: Steps should be well-known and proven
2. **Automation**: Standardize and automate to greatest degree possible

3. **Approval Policies**: Establish policies for limited/no approval requests
4. **Realistic Expectations**: Set clear timelines based on organizational capability
5. **Proper Routing**: Document and redirect misclassified requests (incidents/changes)
6. **Continuous Improvement**: Identify opportunities for faster fulfillment

3.5 Methods of Fulfillment

- **Service Catalog**: Central source for service offerings
- **Automation**: Self-service fulfillment where possible
- **Examples**: Client software installation, virtual server provision

3.6 Service Value Chain Contribution

- **High Contribution**: Deliver & support
- **Medium Contribution**: Engage
- **Low Contribution**: Plan, Design & transition, Obtain/build, Improve

4. Service Desk

4.1 Purpose

To capture demand for incident resolution and service requests. It should also be the entry point and single point of contact for the service provider with all its users

4.2 Key Aspects of a Good Service Desk

- **User Experience**: Major influence on perception of service provider
- **Business Understanding**: Practical knowledge of organization, processes and users
- **Value Addition**: Understand and act on business needs
- **Empathetic Links**: Provide informed connections between provider and users

4.3 Service Desk Provisions

Communication Channels: - Phone calls, IVR, conference calls - Service portals, mobile apps - Social media, discussion forums - Chat functions, live chat, chatbots

Support Tools: - Intelligent telephony systems - Workflow systems for routing and escalation - Knowledge base - Configuration management systems - Remote access tools - Dashboard and monitoring tools

4.4 Service Desk Staff Skills

- Excellent customer service skills
- Empathy and emotional intelligence
- Incident analysis and prioritization
- Effective communication
- Technical knowledge

4.5 Automation Benefits

- Captures and redirects out-of-scope issues
- Provides one-stop shop for requests
- Creates positive customer experience

4.6 Service Value Chain Contribution

- **High Contribution**: Engage
- **Medium Contribution**: Deliver & support
- **Low Contribution**: Plan, Design & transition, Obtain/build, Improve

5. Exam Preparation Summary

5.1 Must-Know Purpose Statements

- **Incident Management**: Minimize negative impact by restoring normal service

- **Problem Management**: Reduce likelihood/impact by identifying causes
- **Service Request Management**: Handle predefined requests effectively
- **Service Desk**: Capture demand and be single point of contact

5.2 Key Term Definitions

Term	Definition
Incident	Unplanned interruption or quality reduction
Problem	Cause or potential cause of incidents
Known Error	Analyzed but unresolved problem
Workaround	Temporary reduction/elimination of impact
Service Request	Predefined user-initiated service action

5.3 Practice Interactions

- Service Desk captures incidents and requests
- Incident Management restores service quickly
- Problem Management identifies root causes
- All practices contribute to Continual Improvement