



SERVICE OPERATION



Service Operation



Achieving effectiveness and efficiency in the delivery and support of services so as to ensure value for the customer and the service provider

SOURCE: ITIL Service Operation Publication, p. 6



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Service Operation Goals



- Coordinate and carry-out day-to-day activities and processes to deliver and manage services at agreed upon levels
- Ongoing management of the technology that is used to deliver and support services
- Execution and measurement of plans, designs, and optimizations
- Monitor performance, assess metrics, and gather data

SOURCE: ITIL Service Operation Publication, p. 13



Service Operation Processes



- Event Management
- Incident and Problem Management
- Request Fulfillment
- Access Management

SOURCE: ITIL Service Operation Publication, p. 15



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Service Operation Communication



- Routine operational communication
- Communication between shifts
- Performance reporting
- Communication in projects
- Communication related to changes, exceptions, and emergencies
- Training on new or customized processes and service designs
- Communication of strategy and design to Service Operation Teams

SOURCE: ITIL Service Operation Publication, p. 29-30



Event Management



- Event – any detectable or discernable occurrence that has significance for the management of the IT infrastructure or the delivery of IT service
- Events are typically notifications created by an IT service, configuration item (CI) or monitoring tool
- Alert – a warning that a threshold has been reached, something has changed, or a failure has occurred

SOURCE: ITIL Service Operation Publication, p. 35-36



Event Management Goals



- Detect events, make sense of them, and determine the appropriate control action
- Basis for Operational Monitoring and Control (if events are configured to report operational information)
- Event Management provides a way of comparing actual performance against design standards and SLAs

SOURCE: ITIL Service Operation Publication, p. 36



Monitoring vs. Event Management

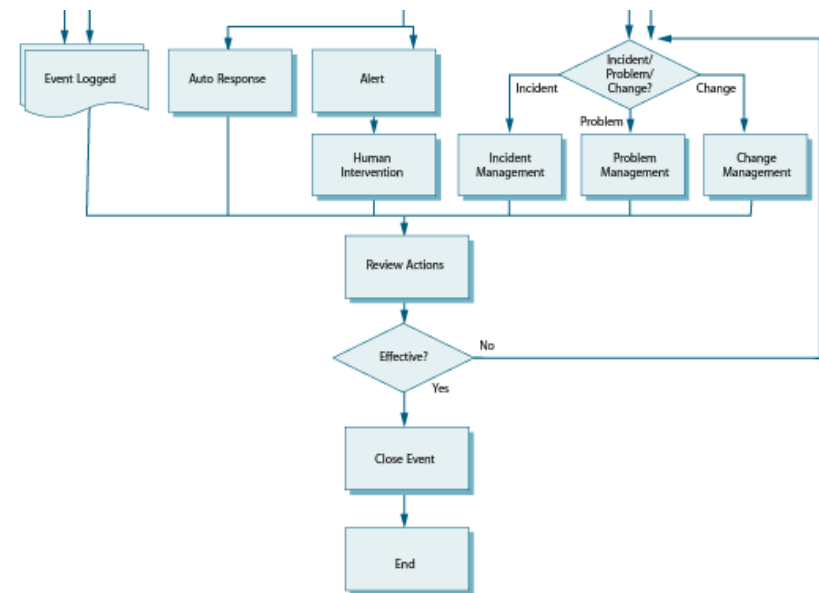
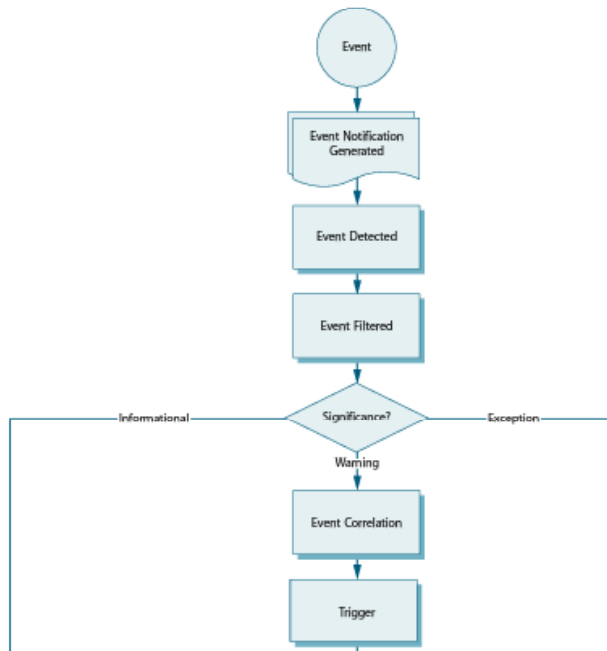


- Event Management focused on generating and detecting meaningful notifications about the status of the IT infrastructure and services
- While Monitoring is required to detect and track notifications – it is much broader than Event Management
- Event Management works with occurrences that are specifically generated to be monitored. Monitoring tracks these occurrences plus those that do not generate events

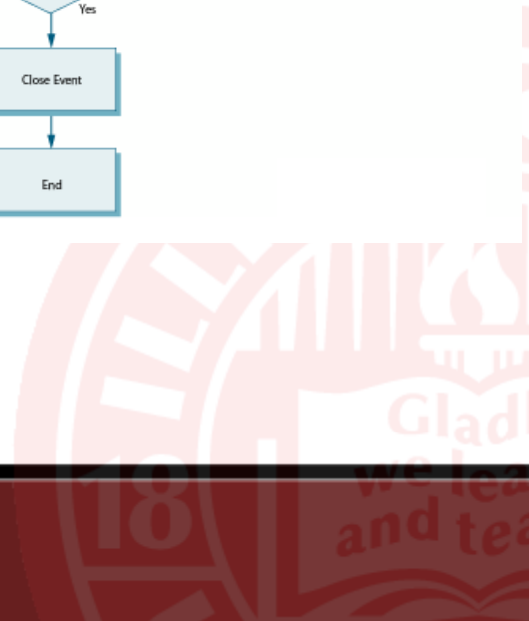
SOURCE: ITIL Service Operation Publication, p. 36



Event Management Process



SOURCE: ITIL Service Operation Publication, p. 38



Types of Events



- Informational – does not require any action and does not represent an exception
- Warning – a service or device is approaching a threshold
- Exception – a service or device is currently operating abnormally (OLA and SLA have been breached)

SOURCE: ITIL Service Operation Publication, p. 40



Incident Management



- Restore normal service operation as quickly as possible and minimize the adverse impact on business operations, thus ensuring the best possible levels of service quality and availability are maintained (as defined by the SLA)
- Incident – an unplanned interruption to an IT service or reduction in the quality of an IT service

SOURCE: ITIL Service Operation Publication, p. 46



Incident Management

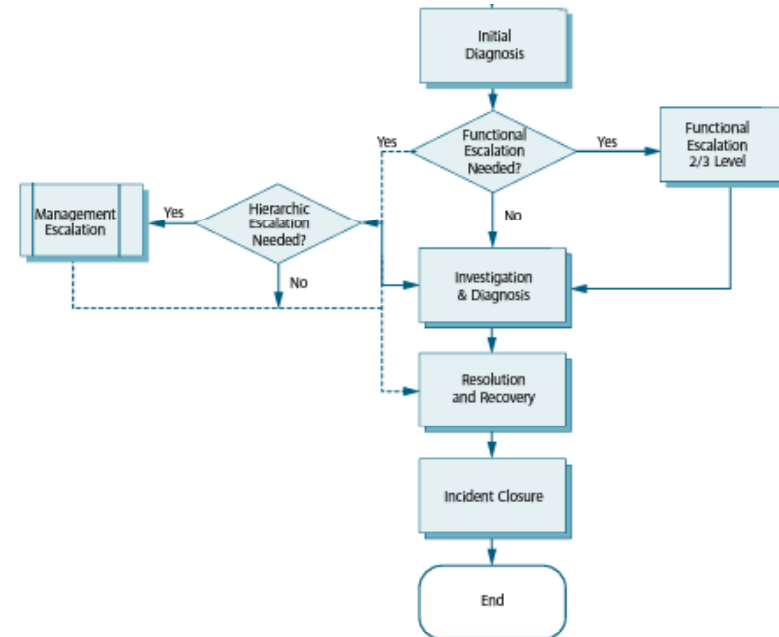
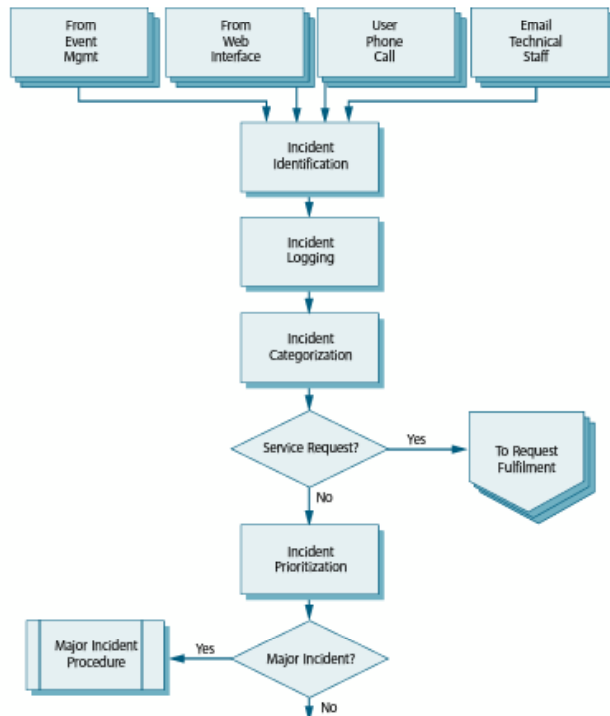


- timelines must be agreed upon for all incident-handling stages (based upon terms of the SLA or OLA)
- Incident models are created to define the steps to be taken to handle a process when an incident occurs
- Major incidents – have a separate procedure with shorter timelines and greater urgency

SOURCE: ITIL Service Operation Publication, p. 47



Incident Management Process



SOURCE: ITIL Service Operation Publication, p. 48



Prioritizing Incidents



- Impact – measure of the effect of an incident on a business process
- Urgency – measure of how long it will be until an incident has a significant impact on the business
- Priority – category used to identify the relative importance of an incident (based on impact and urgency)

SOURCE: ITIL Service Operation Publication, p. 51



Request Fulfillment



- Processes of dealing with service requests from the user
- Provide a channel for users to request and receive standard services for which a pre-defined approval and qualification process exists
- Provide information to users about availability of services and procedure for obtaining them

SOURCE: ITIL Service Operation Publication, p. 56



Request Fulfillment



- Source and deliver the components of requested standard services (licenses, software media)
- Assist with general information, complaints, or comments

SOURCE: ITIL Service Operation Publication, p. 56



Problem Management



- Prevent problems and resulting incidents from happening
- Eliminate recurring incidents
- Minimize impact of incidents that cannot be prevented

SOURCE: ITIL Service Operation Publication, p. 59



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Problem Management

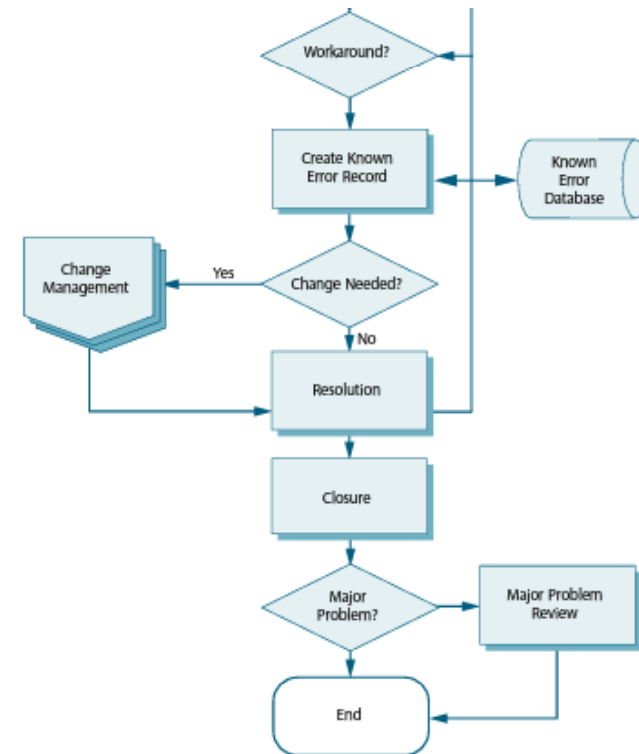
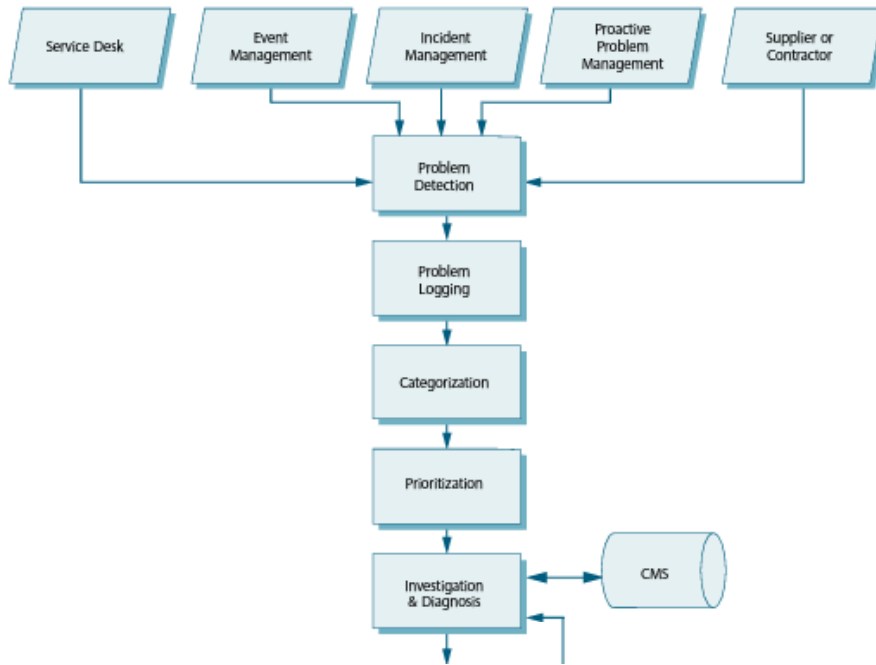


- Problem – the cause of one or more incidents
- Problem Model – standard ways to handle problems in the future
- Workaround – a temporary way of overcoming difficulties
- Known Error – after diagnosis is complete and workaround in place a Known Error record should be placed in the Known Error Database

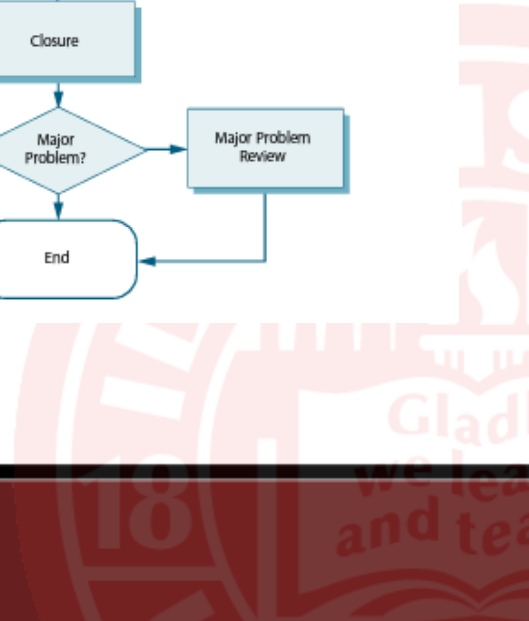
SOURCE: ITIL Service Operation Publication, p. 64



Problem Management Process



SOURCE: ITIL Service Operation Publication, p. 60



Access Management



- Granting authorized users the right to use a service, while preventing access to non-authorized users (aka, Rights Management, Identity Management)
- Access Management implements and enforces security policies, but does not define them (Information Security Management in Service Design)

SOURCE: ITIL Service Operation Publication, p. 68



Access Management Terms



- Access – level and extent of service’s functionality or data that a user is entitled to use
- Identity – information that distinguishes a user as an individual and verifies their status in the organization
- Rights – actual settings where a user is provided access to a service or group of services (read, write, execute)
- Directory services – a specific type of tool used to manage access and rights

SOURCE: ITIL Service Operation Publication, p. 68



Access Management Activities



- Requesting Access
- Verification (user is who they say they are and have legitimate requirement for service)
- Providing Rights
- Monitoring Identity Status (update when job changes)
- Logging and Tracking Access (proper usage of rights)
- Removing or Restricting Rights

SOURCE: ITIL Service Operation Publication, p. 68-70



Service Operation Topics



- Monitoring and Control
- IT Operations
- Mainframe Management
- Server Management and Support
- Network Management
- Storage and Archive
- Database Administration
- Directory Services Management
- Desktop Support
- Middleware Management
- Internet/Web Management
- Facilities and Data Center Management

SOURCE: ITIL Service Operation Publication, p. 82-100, 107



Service Operation Activities

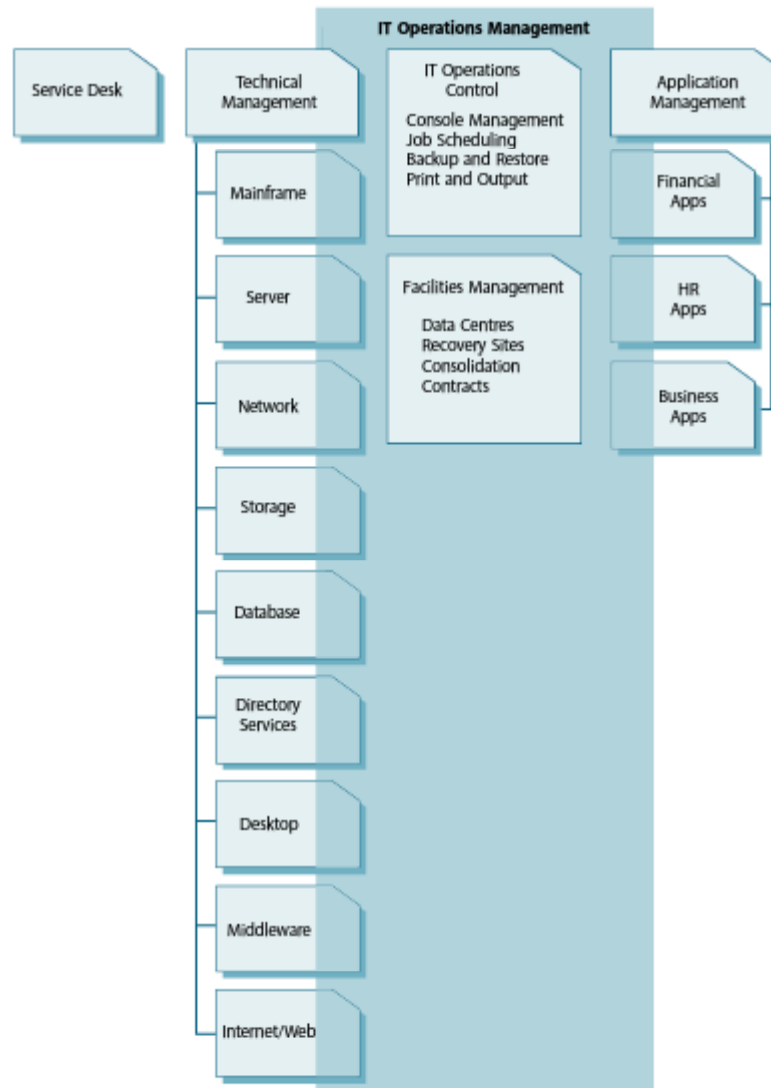


- Service Desk – primary point of contact for users during service disruption, service requests, and some categories of RFCs
- Technical Management – provides detailed technical skills and resources to support the operation of the infrastructure
- IT Operations Management – responsible for the daily operational activities needed to manage the infrastructure
- Application Management – manages applications throughout their lifecycle

SOURCE: ITIL Service Operation Publication, p. 108



Service Operation Activities



SOURCE: ITIL Service Operation Publication, p. 107



Service Desk Objectives

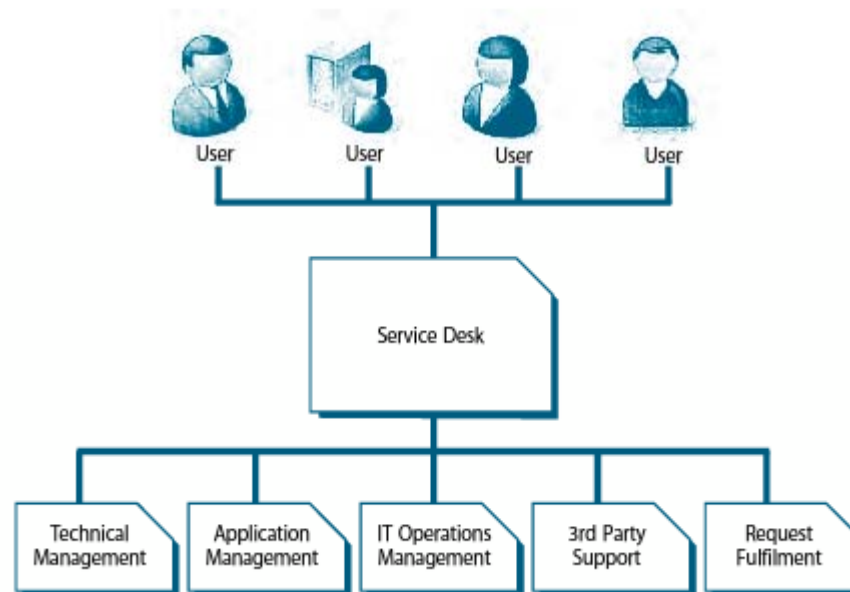


- Logging all relevant incident/service request details; categorizing and prioritizing codes
- First-line investigation and diagnosis
- Resolving incidents/service requests (if possible)
- Escalating incidents/service requests within agreed timelines
- Keeping users informed of progress
- Closing all resolved incidents and requests
- Conducting user satisfaction callbacks/surveys
- Communication with users (notification of impending changes/outages)
- Updating the Configuration Management System (if tasked to do so)

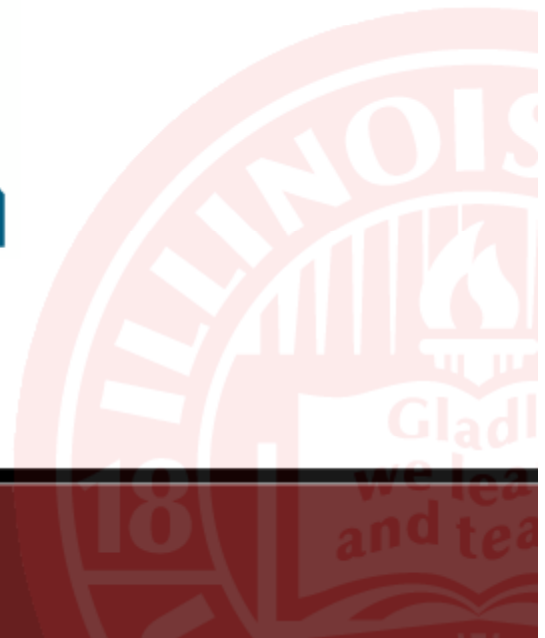
SOURCE: ITIL Service Operation Publication, p. 110



Service Desk Handoffs



SOURCE: ITIL Service Operation Publication, p. 111



Technical Management



- Custodians of technical knowledge and expertise related to managing IT infrastructure
- Provide actual resources to support the IT Service Management (ITSM) lifecycle
- Perform many system management activities
- Execute most ITSM processes

SOURCE: ITIL Service Operation Publication, p. 121



Technical Management Objectives



- Well-designed and highly resilient, cost-effective infrastructure
- Use of adequate skills to maintain the infrastructure
- Swift use of skills to diagnose and resolve technical failures

SOURCE: ITIL Service Operation Publication, p. 121-122



IT Operations Management



- Console Management
- Job Scheduling
- Backup and Restore
- Print and Output Management
- Maintenance Activities
- Facilities Management

SOURCE: ITIL Service Operation Publication, p. 126



IT Operations Management Objectives



- Maintain the “status quo” to achieve infrastructure stability for day-to-day processes and activities
- Identify opportunities to improve operational performance and save costs
- Initial diagnosis and resolution of operational incidents

SOURCE: ITIL Service Operation Publication, p. 126



Application Management



- Performed by any department, group, or team managing and supporting operational applications
- Role in the design, testing, and improvement of applications
- Involved in development projects – but not usually the same as application development team
- Custodian of application expertise
- Provides resources throughout lifecycle
- Provides guidance to IT Operations Management

SOURCE: ITIL Service Operation Publication, p. 128-129



Application Development Objectives

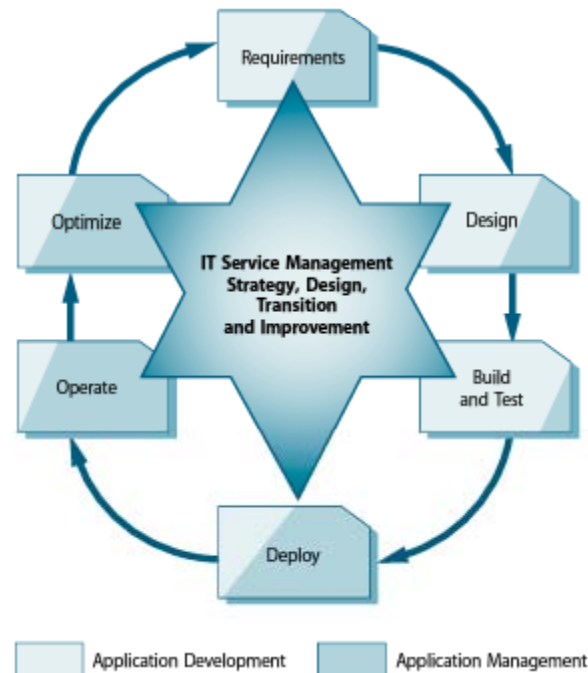


- Well designed, resilient, and cost-effective applications
- Ensure required functionality is available to achieve required business outcome
- Adequate technical skills to maintain operational applications in optimum condition
- Swift use of technical skills to diagnose and resolve any technical failures

SOURCE: ITIL Service Operation Publication, p. 129



Application Management Lifecycle



SOURCE: ITIL Service Operation Publication, p. 130



Up Next

Continual Service Improvement



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