

***Audiobook Companion PDF***

# ITIL®

## *For Beginners*

**SECOND EDITION**

**The Complete Beginner's  
Guide to ITIL®**



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# I introduction I

fig. 1



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## I I I Understanding Service Management

fig. 2



fig. 3

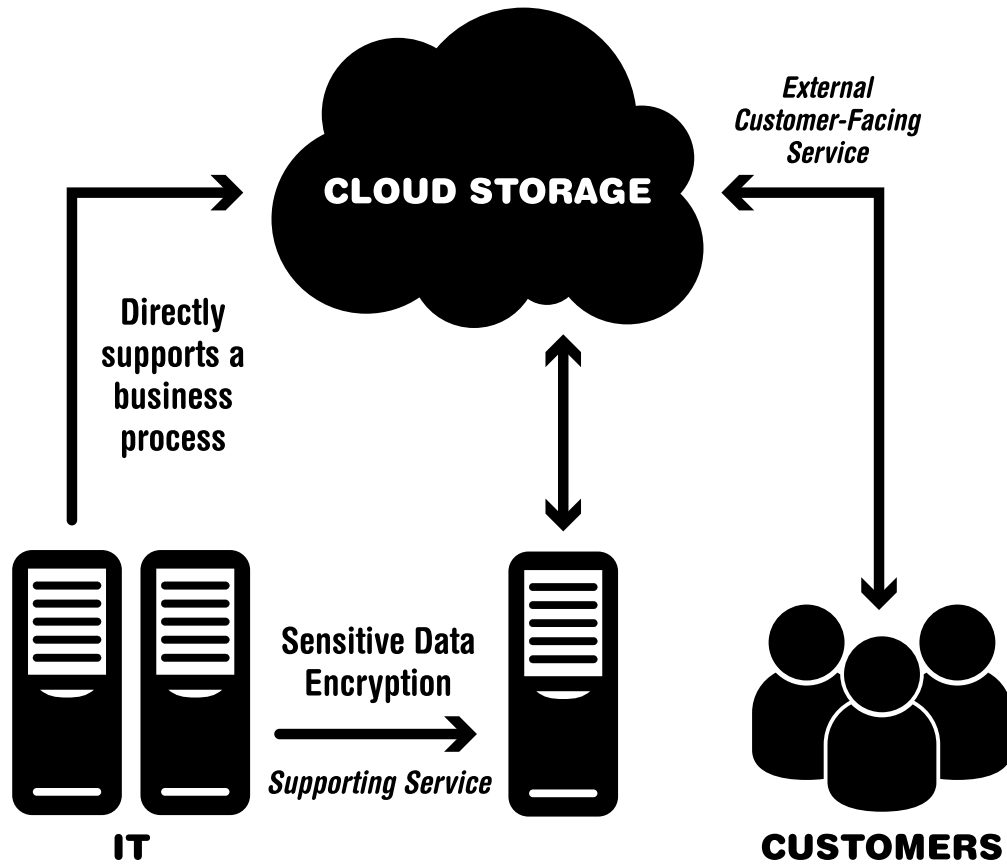
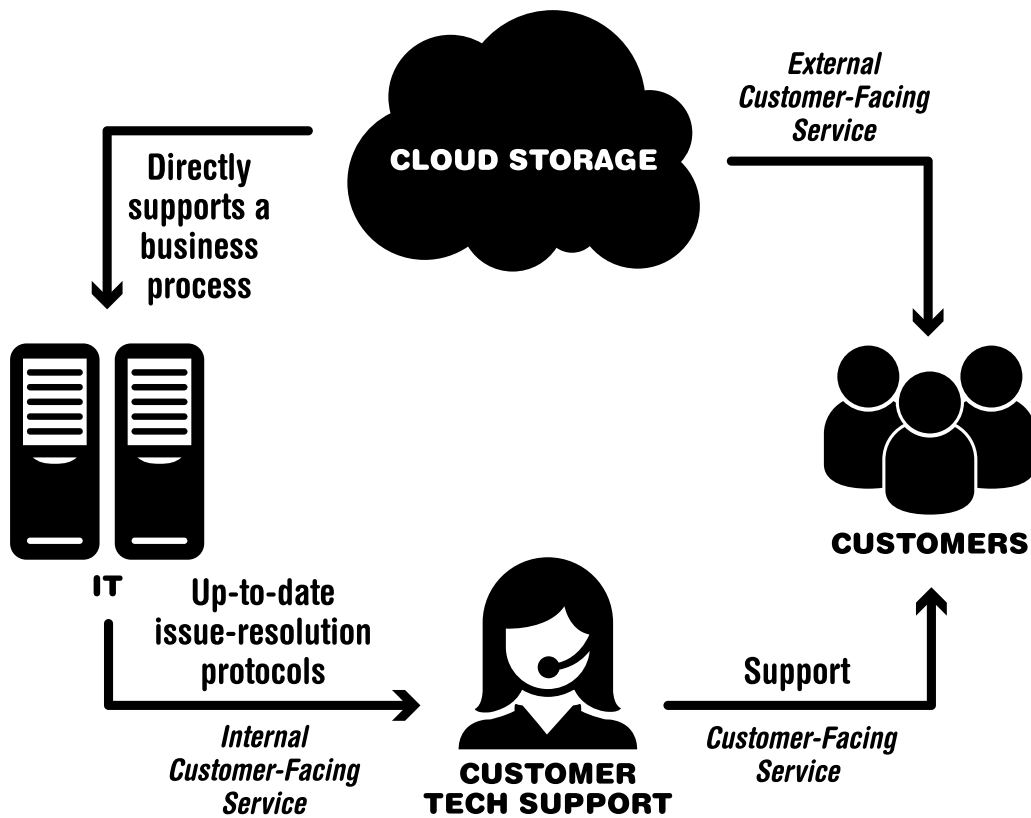


fig. 4

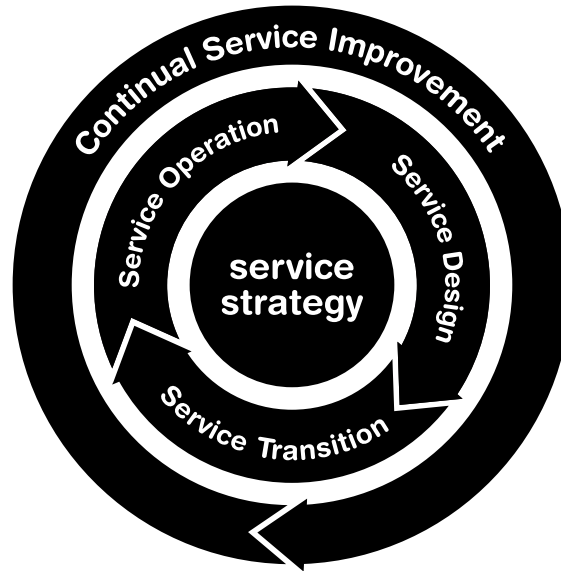


# | 2 |

## The ITIL Service Lifecycle

fig. 5

### The ITIL Service Lifecycle



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# | 3 |

## Service Strategy

fig. 6

### Number of Planned New Services

- A percentage indicator quantifying the creation of new services following a strategic review.

### Number of Unplanned New Services

- A percentage indicator quantifying the creation of new services that were not triggered by strategic review.

### Number of Strategic Initiatives

- The number of strategic initiatives spurred by the Service Portfolio Management process (another process in the Service Strategy Life Cycle phase that interfaces with ITSM, see the following section).

### Number of New Customers

- The number of new customers using the service.

### Number of Lost Customers

- The number of customers that discontinued use of the service.

fig. 7

	Total Annual Cost	% Used for Tracking	Total Tracking Cost
Package Scanning Hardware	7.5 M	50	3.75 M
Labor	28 M	5	1.4 M
Servers	1 M	15	150 K
Software	100 K	100	100 K
		Total Service Cost	5.4 M

fig. 8

### **Adherence to Budgeting Process**

- A percentage indicator of total projects undertaken in relation to projects budgeted.
- Uses the standard IT budgeting process.

### **Cost-Benefit Estimation**

- A percentage indicator of total project files in relation to total project files containing cost-benefit estimates.

### **Post-Implementation Review**

- A percentage indicator of total projects implemented in relation to total projects in which costs and benefits were evaluated after implementation.

### **Adherence to Approved Budget**

- A percentage indicator of total IT expenses in relation to expenses exceeding approved IT budget.

### **Adherence to Project Resources**

- A percentage indicator of total project expenses in relation to budgeted amounts.

### **Proposals for Cost Optimization**

- A number of proposals made by Financial Management aimed at improving financial economy of the project.

### **Number of Customer Complaints**

- The total number of received customer complaints.

### **Number of Accepted Customer Complaints**

- The total number of customer complaints that were determined to be justified.

### **Number of Customer Satisfaction Surveys**

- The total number of Customer Satisfaction Surveys deployed during a specific reporting period.

### **Percentage of Returned Questionnaires**

- The percentage of returned questionnaires in relation to the total number of questionnaires deployed during a specific reporting period.

### **Customer Satisfaction Per Service**

- This is a service-specific customer satisfaction measurement, including standard deviation.
  - Determined by Customer Satisfaction Surveys.
- 

## **| 4 | Service Design**

### **Services Covered by SLAs**

- The number of services covered by SLAs.

### **Services Covered by OLAs/UCs**

- The total number of services in which SLAs are supported by OLAs/UCs.

### **Monitored SLAs**

- The number of SLA-defined services that are being monitored for shortcomings.

### **SLAs Under Review**

- The number of SLA-defined services subject to regular review.

### **Fulfillment of Service Levels**

- The number of SLA-defined services for which the agreed-upon service levels are being fulfilled.

### **Number of Service Issues**

- The number of issues in a service provision that are identified and in the process of being resolved by an improvement plan.



### **Incidents Due to Capacity Shortages**

- The number of incidents occurring due to shortages of IT resources or component capacity.

### **Exactness of Capacity Forecast**

- A comparison of predicted capacity and resulting capacity.

### **Capacity Adjustments**

- The number of adjustments made to service and component capacity in response to changing demand.

### **Unplanned Capacity Adjustments**

- The number of unplanned adjustments made to service and component capacity in response to capacity bottlenecks.

### **Resolution Time of Capacity Shortage**

- The time required to resolve capacity bottlenecks.

### **Capacity Reserves**

- The percentage of excess capacity measured during both normal and peak demand times.

### **Percentage of Capacity Monitoring**

- The percentage of services being monitored for capacity.

### **Service Availability**

- A relative measurement of services actually available in relation to those promised in SLAs and OLAs.

### **Number of Service Interruptions**

- The number of interruptions in service.

### **Duration of Service Interruptions**

- The average length of time between the beginning of a service interruption and its resolution.

### **Availability Monitoring**

- A percentage measurement of total services and infrastructure components in relation to those being monitored for availability.

### **Availability Measures**

- The number of measures implemented to increase availability.

fig. 13

### **Business Processes with Continuity Agreements**

- The percentage of business processes that have been assigned explicit continuity targets.

### **Gaps in Disaster Preparation**

- The number of unresolved preparation gaps that could cause problems in the event of a disaster.
- These are major threats without defined countermeasures.

### **Implementation Duration**

- The implementation time measured from the time at which a disaster-related risk is identified to the time at which the risk has been fitted with a suitable continuity mechanism.

### **Number of Disaster Practices**

- The number of disaster practice drills executed.

### **Number of Identified Shortcomings during Disaster Practices**

- The number of shortcomings identified during preparation for disaster events.

fig. 14

### **Number of Implemented Preventive Measures**

- The number of preventative security measures implemented in the response to information security threats.

### **Implementation Duration**

- The duration of time between first identification of a security threat and the implementation of suitable countermeasures.

### **Number of Major Security Incidents**

- The number of security threats organized by degree of severity.

### **Number of Security-Related Downtimes**

- The number of times an incident interrupted or reduced the availability of service.

### **Number of Security Tests**

- The number of security tests and trainings carried out.

### **Number of Identified Shortcomings during Security Tests**

- The number of security shortcomings identified during tests.

fig. 15

### **Number of Agreed-Upon UCs**

- The percentage of contracts underpinned by UCs.

### **Number of Contract Reviews**

- The number of contract and supplier reviews.

### **Number of Identified Contract Breaches**

- The number of times contractual obligations were breached by suppliers.
- 

## **151 Service Transition**

fig. 16

### **Number of Major Changes**

- The number of major changes that were assessed by the CAB.

### **Number of CAB Meetings**

- The number of times the CAB met during execution of the Change Management function's undertaking.

### **Time for Change Approval/Rejection**

- The amount of time to approve or reject proposed change as presented in the RFC.

### **Change Acceptance Rate**

- The number of changes that won approval in relation to the total number of RFCs submitted.

### **Number of Emergency Changes**

- The number of Emergency Changes assessed by the Emergency Change Advisory Board (ECAB).

fig. 17

### **Number of Projects**

- The number of major release rollouts overseen by Project Management.

### **Percentage of Projects with Project Charters**

- A percentage of projects that began only after a completed and signed *Project Charter* had been procured.
- Project Charters outline the objectives of the project, identify the stakeholders and appoint a Project Manager.

### **Number of Changes to the Project Charter**

- The number of changes to the Project Charter after the start of the project.

### **Adherence to Project Budget**

- A measurement of planned budget vs. actual expenditures, including both financial and personnel resources.

### **Project Delays**

- A comparison of actual project completion dates and planned project completion dates.

fig. 18

### **Number of Releases**

- The number of releases rolled out into the live environment, grouped into Major and Minor categories.

### **Duration of Major Deployments**

- The average time required to deploy a release from approval to completion.

### **Number of Release Backouts**

- The number of releases that did not reach completion before they were canceled.

### **Proportion of Automatic Release Distribution**

- A comparison of releases distributed automatically in relation to total releases.

fig. 19

### Percentage of Failed Release Component Acceptance Tests

- A percentage evaluation of release components that failed acceptance tests in relation to total release components.

### Number of Identified Errors

- The number of identified errors that were discovered during release testing.

### Time for Error Fixing

- The time between error identification and resubmission of release with errors resolved.

### Percentage of Failed Service Acceptance Tests

- A percentage evaluation of total service acceptance tests given in relation to total service acceptance tests that failed to obtain the required customer sign-off.

fig. 20

### Verification Frequency

- The frequency of physical verification of CMS contents.

### Number of Incidents Owing to Inaccurate CMS Information

- The number of incidents that were caused by inaccurate information in the Configuration Management System.

### Effort for CMS Verification

- A record of the effort expended to verify CMS contents.

### CMS Coverage

- The percentage of configuration components that are represented in the CMS.

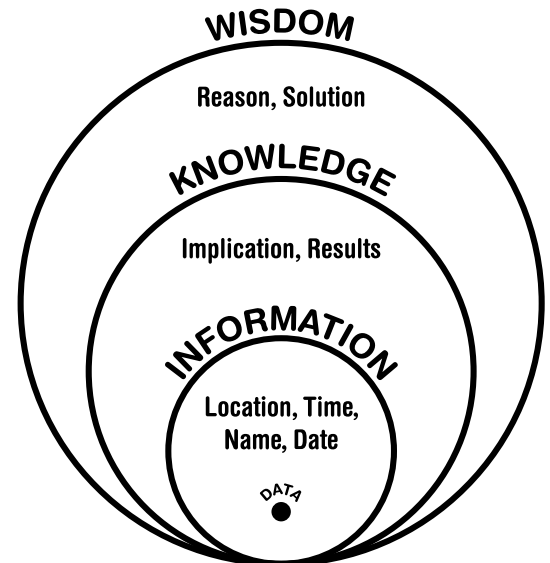
### Number of Unauthorized Changes Detected Automatically

- The number of unauthorized changes found by way of audits using automatic configuration update software.

### Number of CMS Errors

- The number of errors found in the CMS during an audit.

fig. 21



# 161

## Service Operation

fig. 22

### Number of Repeated Incidents

- The number of repeated Incidents with known resolution methods.

### Incidents Resolved Remotely

- The number of Incidents resolved by the Service Desk without working at user's location.

### Number of Escalations

- The number of escalations resulting from incidents not being resolved in the proposed resolution time.

### Number of Incidents

- The number of Incidents as recorded and categorized by the Service Desk.

### Average Initial Response Time

- The average amount of time elapsed between when a user reports an Incident and when the Service Desk responds to the complaint.

### Incident Resolution Time

- The time required to resolve an Incident.

### First Time Resolution Rate

- The percentage of Incidents resolved at the Service Desk upon the first contact made by the customer.

### Resolution Within SLA

- The percentage of Incidents resolved at the Service Desk satisfying all requirements set forth by the SLA.

### Incident Resolution Effort

- A record of the average expenditure of personnel and financial resources to resolve Incidents.

**Number of Problems**

- The number of problems registered by Problem Management.

**Problem Resolution Time**

- The average time needed to obtain problem resolution.

**Number of Unresolved Problems**

- The number of problems without a known root cause.

**Number of Incidents Per Known Problem**

- The average number of Incidents linked to any given known problem.

**Time Until Problem Identification**

- The average time between identifying first Incident occurrence and identifying the root cause.

**Problem Resolution Effort**

- A record of the average work required to resolve problems.

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**Continual Service Improvement**

**The ITIL Service Lifecycle**

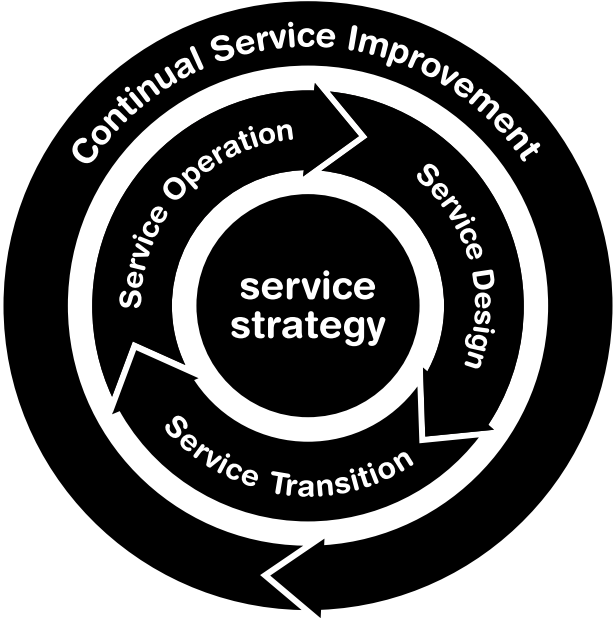


fig. 25

### **Number of Service Reviews**

- The number of Service Reviews completed during the reporting period.

### **Number of Identified Weaknesses**

- The number of weaknesses uncovered during the Service Review.

fig. 26

### **Number of Process Benchmarkings**

- The number of Process Benchmarkings, Maturity Assessments, and Audits completed during the reporting period.

### **Number of Process Evaluations**

- The number of formal Process Evaluations carried out.

### **Number of Identified Weaknesses**

- The number of weaknesses identified during Process Evaluations

### **Number of CSI Initiatives**

- The number of CSI Initiatives developed in response to identified weaknesses found by way of Service Reviews and Process Evaluations.

### **Number of Completed CSI Initiatives**

- The number of CSI Initiatives completed during a given reporting period.

fig. 27

**1. Define what to measure**

**2. Define what areas can be measured**

**3. Collect the data**

**4. Process the data**

**5. Analyze the data**

**6. Present the data**

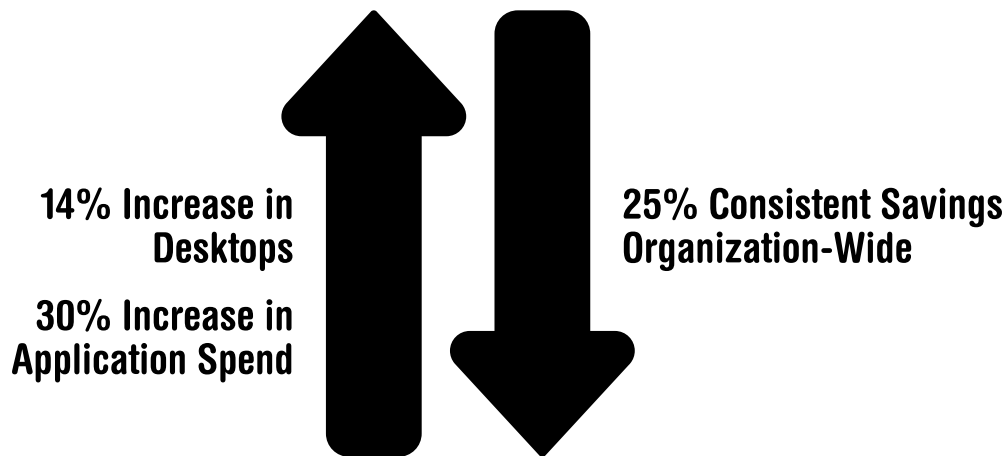
**7. Implement change**



# | 9 |

## A Case for ITIL

fig. 28



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## | glossary |

### **1st Level Support**

First-response assets deployed to resolve an interruption or mitigation of service

### **2nd Level Support**

Assumes control over incidents which cannot be resolved by 1st level support

### **Access Profiles**

Protect integrity and confidentiality of electronic information by determining what groups of data are accessible by various “user roles”

### **Access Rights**

A set of data defining what service a user is allowed to access

### **Business Continuity Management (BCM)**

The planning and development of contingencies in the event of dramatic or unforeseen circumstances

### **Business Continuity Targets**

Minimal level of service needed to ensure that normal flow of business can continue in the event of a service interruption

### **Business Relationship Manager (BRM)**

A role in ITIL responsible for nurturing a communication channel between IT and service customers. The BRM oversees the business management relationship process in the ITIL service strategy lifecycle phase

### **Capacity Report**

Provides various ITIL processes and IT management personnel with information on service, and resource utilization and performance

### **Change**

Refers to the addition, modification, or removal of anything that could have an effect on IT services

### **Change Advisory Board (CAB)**

A group of people who help the change manager assess, prioritize, and schedule changes

### **Change Build Phase**

Shorthand for the “change scheduling and build authorization” subprocess under ITIL’s change management process

### **Change Deployment Phase**

Shorthand for the “change deployment authorization” subprocess under ITIL’s change management process

### **Change Evaluation Report**

Documents ITIL’s change evaluation process

### **Change Management**

The assessment of and decision about a proposed change to an IT service

### **Change Manager**

A person who is responsible for overseeing the lifecycle of a change

### **Change Proposal**

Assesses the risk, impact, and feasibility of a proposed major change, such as the adding or modifying of a service

### **Checklist Incident Prioritization Guideline**

A set of standards used to determine the severity level and appropriate classification for an incident

**Configuration Items**

Available assets that may be combined into a configuration

**Configuration Management System**

A set of tools and data used for collecting, storing, managing, updating, analyzing, and presenting data about all configuration items and their relationships

**Costs to Service**

Expense incurred by servicing customers

**CSI Initiatives**

Developed in the continual service improvement lifecycle phase, CSI initiatives assemble the results of service reviews and process evaluations into specific initiatives aimed at improving services and processes

**Customer Portfolio**

A record containing information about all customers who use a particular IT service

**Database**

A collection of data stored and organized to support processes that require information

**Emergency Change**

A change that must be implemented as soon as possible

**Event**

A change in state that has an implication that affects a configuration item or service. Events often cause IT personnel to take action and may also result in incidents being logged

**Event Record**

A log that filters and categorizes events and describes how and where to take necessary action. Also known as an event management log

**Exception Event**

An unusual event that may require responsive action

**Financial Analysis**

Contains information on the cost of providing services relative to the profitability that's to be derived from the services

**Function**

A known capability, such as a computer network, a service desk, or a support team, that can be relied upon to support a process

**Incident**

An unplanned interruption or substantial reduction in the quality of a service

**Incident Prioritization Guideline**

Describes the rules for prioritizing incidents, including a description of what qualifies as a "major incident"

**Incident Management**

Activities undertaken to analyze and correct hazards and to prevent future reoccurrence of hazards

**Incident Model**

A prescription for a specific action plan that can be used to resolve common incidents

**Incident Record**

A set of data documenting the history of an incident from origin to closure

**ITIL Foundation Level Certification**

The broadest ITIL certification. The ITIL Foundation level certification is the most popular and is often a prerequisite for more advanced ITIL coursework

**ITIL Service Lifecycle**

A five-phase approach to implementing new or improving existing IT services for the purpose of business adaptation and growth

**IT Service Management**

A broad, inclusive term referring to the practice of establishing, operating, and monitoring IT services to meet business needs

**Key Performance Indicators (KPIs)**

Process-specific performance indicators used to gauge and assess performance levels of various processes in a given service lifecycle phase

**Known Errors**

Problems that have been documented and have known root causes and workarounds

**Network**

A group of two or more computer systems linked together

**Operational Level Agreements (OLAs)**

Documents and describes services to be provided from one part of an organization to another in support of the IT department's delivery of services to customers

**Patterns of Business Activity (PBA)**

Documented business trends showing the changing unique demands placed upon a business given various circumstances such as time of day, location, pricing, etc.

**Process**

A structured set of activities designed to accomplish a specific objective

**Problem**

The cause of one or many incidents. The cause is not usually known at the time the problem record is created

**Problem Management Report**

A report that provides problem management data to other ITIL service management processes

**Problem Record**

Contains all details of a problem and documents history of the problem from discovery to closure

**Process Architecture**

An overview of all processes utilized for a support task, process architecture refers to making sure all processes are aligned and cooperative with one another

**Project Management**

The application of methods, skills, knowledge, and processes to arrive at a certain objective

**Project Plan**

A formal document that requires approval and denotes important resources, milestones, and activities for a project—also known as a "service transition plan"

**Recovery Plan**

Detailed instructions on how to return a system to a working state, including instructions for the recovery of data. May include steps to allow a temporary restoration of normal services, even before full functionality and full data recovery have been achieved

**Release**

Contains one release unit, or a structured set of release units, each of which contains a set of new, changed, or unchanged configuration items that are tested and introduced into a live environment to accomplish one or several approved changes

**Release Management**

Shorthand for ITIL's "release and deployment" function

**Release Package**

Synonymous with "release"

**Request**

A formal request from a user that something be provided

**Requests for Change (RFC)**

A formal request for a proposed change, includes details that may be submitted on paper or electronically

**Request Model**

Defines steps to be followed to address various service requests

**Request Record**

A record containing all the details of a service request

**Security Alert**

A warning of an imminent or ongoing security threat

**Service**

A means of providing value to customers by facilitating outcomes customers want to achieve without incurring ownership of particular costs and risks

**Service Design Package (SDP)**

Documentation outlining all aspects of a proposed IT service. The SDP is utilized throughout all phases of the ITIL service lifecycle

**Service Desk**

Provides a Single Point of Contact (SPOC) to meet the communication needs of both users and IT employees

**Service Levels**

Quantity and quality of service as defined in SLAs, OLAs, and UCs

**Service Level Agreement (SLA)**

Documents and describes service level commitments from the IT service provider to the customer service

**Service Level Requirement**

A business goal attached to a project that is necessary for satisfying an established service objective

**Service Review Report**

The principal output from the service review process, containing several "suggested service improvements"

**Standard Changes**

Changes to an IT service that occur frequently and pose minimal disruption

**Supplier Strategy**

Used to catalog, compare, and make decisions on which supplier to use and when

**Supporting Service**

Also known as an "infrastructure service," supporting services are IT services that are imperceptible to the larger business apparatus

**Underpinning Contact (UC)**

Documents and describes services to be provided from a third party to support the IT department's delivery of services to customers

**User Roles**

Determines access rights

**Warning**

A record indicating the possibility of an Incident and the need for responsive action

**Workarounds**

Temporary solutions that mitigate the impact of "known errors"

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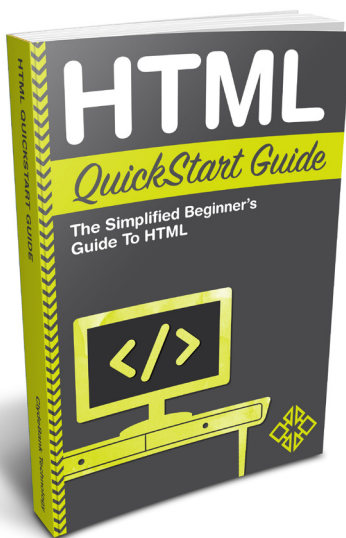


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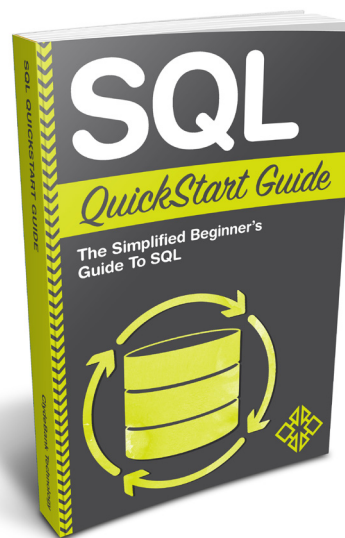
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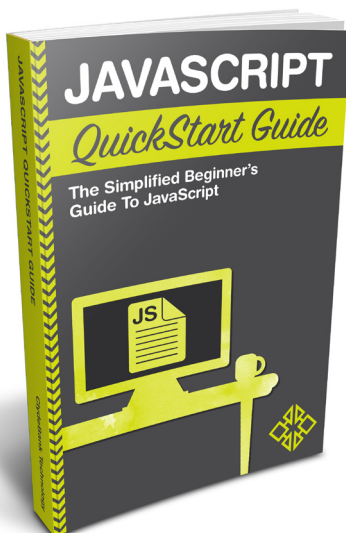
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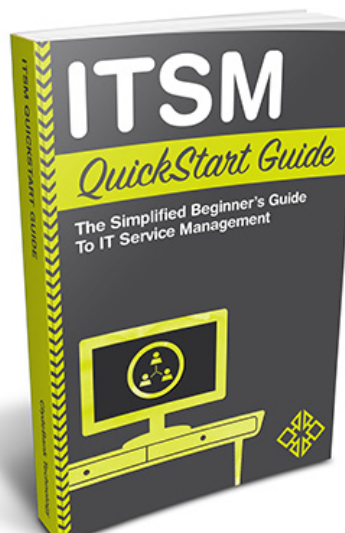
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