ITIL™ Edition 2011 Processes & Functions

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information technology infrastructure library

The ITIL Service Lifecycle is an integrated closed-loop system

- Continual Service Improvement
- Service Operation
- Service Transition
- Service Strategy
- Service Design

Continual Service Improvement — Service Design — Service Strategy — Service Transition — Service Operation

CMMI, TOGAF, Six Sigma, SOA, COBIT, M_o_R — PMBoK, PRINCE2, ISO20000, ISO27002, ISO38500, ISO9000

Service Strategy

Strategy Management for IT Services
Goal: Defining and maintaining an organization's perspective, position, plans and patterns with regard to its services and the management of those services. Ensure that the strategy is defined, maintained and achieves its purpose. Service strategy articulates how a service provider will enable an organization to achieve its business outcomes and establish the criteria for success.

Activity:
- Strategic assessment
  - Analyze the internal environment
  - Analyze the external environment
  - Define market spaces
  - Identify strategic industry factors
  - Establish objectives
- Strategy generation, evaluation and selection
  - Determine the perspective
  - Form a position
  - Adopt patterns of action
- Strategy execution
  - Other service management processes
  - Align assets with customer outcomes
  - Optimize critical success factors
  - Prioritize investments
- Measurement and evaluation
- Continual service improvement
- Expansion and growth

Input: Existing plans, Research on aspects of the environment, Vendor strategies and product roadmaps, Customer interviews and strategic plans, Service portfolio, Service reporting, Audit reports that indicate compliance with (or deviation from) the org's strategy.

Output: Strategic plans, Tactical plans, Strategy review schedules and documentation, Mission and vision statements, Policies, Strategic requirements for new services, and input into which existing services need to be changed

Demand Management
Goal: Understand, anticipate and influence customer demand for services and to work with capacity management to ensure the service provider has capacity to meet this demand. Ensure services are designed, tested and delivered to achieve of business outcomes.

Activity:
- Identify sources of demand forecasting
- Identify patterns of business activity (PBA)
- Determine User profiles (UP)
- Establish Activity based demand management
- Develop differentiated offerings
- Manage or influence operational demand

Input: Initiative to create a new service, or to change an existing service, Service models, Customer portfolio, Service portfolio and Customer agreement portfolio, Charging models, Chargeable items, Service agreement portfolios and plans

Output: User profiles, Patterns of business activity will be formally documented and included in the service and customer portfolios, Policies for management of demand when resources are over-utilized, Policies for utilization

Business Relationship Management
Goal: To establish and maintain a business relationship between the service provider and the customer based on understanding the customer and its business needs. To identify customer needs and ensure that the service provider is able to meet these requirements.

Activity:
- Understand the business relationship with the Customer
- Establish the Business Relationship Management process
- Establish the Initiation by customers
- Establish the Initiation by the service provider
- Establish the BRM process through the lifecycle

Input: Customer requirements, Customer requests, complaints, escalations or compliments, The service strategy, the customer's strategy, service portfolio, project portfolio, Service level agreements, Requests for change, Patterns of business activity and user profiles

Output: Stakeholder definitions, Defined business outcomes, Agreement to fund (internal) or pay for (external) services, customer portfolio, Service requirements for strategy, design and transition, Customer satisfaction surveys, Schedule of training and awareness events

Service Portfolio Management
Goal: To ensure that the service provider has the right mix of services to balance the investment in IT with the ability to meet business outcomes. Track the investment in services throughout their lifecycle. Ensure that services are clearly defined and align with business outcomes.

Activity:
- Define: Inventory services, ensure business cases and validate portfolio data
- Analyze: Maximize portfolio value, align, prioritize & balance supply and demand
- Approve: Finalize proposed portfolio, authorize services and resources
- Charter: Communicate decisions, allocate resources and charter services

Input: Strategy plans, Service improvement opportunities, Financial reports, Requests, suggestions or complaints from the business, Project updates for services

Output: Up-to-date service portfolio, Service charters that authorize the work for designing and building new services or changes to existing services, Reports on the status of new or changed services, Reports on the investment made in services in the service portfolio & ROI

Financial Management for IT Services
Goal: To secure the appropriate funding to design, develop and deliver services that meet the strategy of the organization. Identify services that the provider is not able to provide. Identify the balance between the cost and quality of service. Balance of supply and demand.

Activity:
- Accounting: chart of accounts, analysis and reporting, action plans
- Budgeting: analysis of previous budget, assessment of plans, specification of changes to funding and spending, cost and incentive strategies, negotiation
- Charging: charging policies, decide chargeable items, pricing, billing

Input: Business information: Corporate governance and business security policies and guidelines, security plans, Risk Analysis and responses, IT information, Service information, Risk Analysis and responses, Details of all security events and breaches, Change information, CMS

Output: Policies, standards and practices defined by legislation, regulators and external financial managers, Generally Accepted Accounting Practices (GAAP) and local variations, Supplier data, CMS, service portfolio, customer agreement portfolio, application and project portfolio

Output: Service valuation, Service investment analysis, Compliance, Cost optimization, Business impact analysis (BIA), Planning confidence

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Service Design

Design Coordination
Goal: Ensure the goals and objectives of the service design stage are met by providing and maintaining a single point of coordination and control for all activities and processes within this stage of the service lifecycle.

Activity:
- Overall lifecycle stage activities include:
  - Define and maintain policies and methods
  - Plan design resources and capabilities
  - Coordinate design activities
  - Manage design risks and issues
  - Improve service design
- Individual design activities include:
  - Plan individual designs
  - Coordinate individual designs
  - Monitor individual designs
  - Review designs and ensure handover of SDPs.

Input: Service charters, Change requests, Business & IT strategy, plans and financial plans, Business impact analysis, service portfolio, constraints and resource limitations, Governance, Corporate, legal and regulatory policies and requirements, project schedule, CMS, EA, Metrics

Output: Service designs and SDPs, revised enterprise architecture, revised management systems, Revised measurement and metrics methods, Revised processes, Service portfolio updates, Updates to change records.

Capacity Management
Goal: To ensure that the capacity of IT services and the IT infrastructure meets the agreed capacity- and performance-related requirements in a cost-effective and timely manner. Meet both the current and future capacity and performance needs of the business.

Activity:
- Design-related activities
  - Exploitation of new technology, Designing resilience,
- Ongoing iterative activities
  - Monitoring, Analysis, Tuning, Implementation
- Demand management in capacity management
- Modelling and trending
  - Baselining, Trend analysis, Analytical modelling, Simulation Modelling,
- Application sizing
- Types of Capacity Management
  - Business, Service, Component

Input: Business information: from the organization's business strategy, plans and financial plans, and information on their current and future requirements, Service and IT information: from Service Strategy, the IT strategy and plans and current budgets, covering all areas of technology

Output: CMS, Capacity Plan, Service performance information and reports, Workload analysis and reports, Ad hoc capacity and performance reports, Forecasts and predictive reports, Thresholds, alerts and events

IT Service Continuity Management
Goal: To support the overall business continuity management (BCM) process by ensuring that, by managing the risks that could seriously affect IT services, the IT service provider can always provide minimum agreed business continuity-related service levels.

Activity:
- Stage 1: Initiation
- Stage 2: Requirements and Strategy
  - Requirements - Business Impact Analysis (BIA)
  - Requirements - Risk Analysis - M_o_R
  - IT Service Continuity Strategy
  - Risk Response Measures - Off-site Storage, ITSCM Recovery Options
- Stage 3: Implementation
  - Organizational Planning
  - Testing
    - Walk-through, Full, Partial, Scenario
- Stage 4: On-going Operation
  - Education, awareness, training, review, testing, Change Management
- Stage 5: Invocation

Input: Business strategy, plans and financial plans, and information on their current and future requirements, IT information: from the IT strategy and plans and current budgets, A Business Continuity Strategy and a set of Business Continuity Plans: SLAs and SLRs

Output: Service continuity and recovery plans, ITSCM policy strategies , ITSCM plans , Emergency Response Plan, Damage Assessment Plan , Salvage Plan , Vital Records Plan, Crisis Management and Public Relations Plan, Accommodation and Services Plan , Security Plan

Information Security Management
Goal: To align IT security with business security and ensure that the confidentiality, integrity and availability of the organization's assets, information, data and IT services always matches the agreed needs of the business.

Activity:
- Production and maintenance of an overall information security policy and a set of supporting specific policies
- Communication, implementation and enforcement of the security policies
- Assessment and classification of all information assets and documentation
- Implementation, review, revision and improvement of a set of security controls and risk assessment and responses
- Monitoring and management of all security breaches and major security incidents
- Analysis, reporting and reduction of the volumes and impact of security breaches and incidents
- Schedule and completion of security reviews, audits and penetration tests

Input: Business information: Corporate governance and business security policies and guidelines, security plans, Risk Analysis and responses, IT information, Service information, Risk Analysis and responses, Details of all security events and breaches, Change information, CMS

Output: Security Management Policy, Security Management Information System (SMIS), Revised security risk assessment reports, Security controls, Audits and audit reports, Security test schedules and plans, Security breaches and major incidents reports, Supplier security

Financial Management for IT Services
(see Service Strategy column)

Availability Management
Goal: To ensure that an agreed level of IT service is provided for all current IT services, and that future services are delivered to agreed achievable targets.

Activity:
- Reactive activities
  - Monitoring, measuring, analysing, reporting and reviewing service and component availability
  - Investigating all service and component unavailability and instigating remedial action
- Proactive activities
  - Planning and designing new or changed services
  - Determining the VBFs, in conjunction with the business & ITSCM
  - Risk assessment and management
  - Implementing cost-justifiable counter-measures, including risk reduction and recovery mechanisms
  - Reviewing all new and changed services and test all availability and resilience mechanisms
  - Continual reviewing and improvement

Input: Business impact information, Reports and registers, Service information, Service information, Financial information, Change and release information, Service asset and configuration management Service targets, Component information, Technology information, performance

Output: The availability MIS (AMIS), Availability plan, Availability and recovery design criteria and proposed service targets for new or changed services, Service availability, reliability and maintainability reports of achievements against targets, PSO, SIP

Service Level Management
Goal: To ensure that an agreed level of IT service is provided for all current IT services, and that future services are delivered to agreed achievable targets.

Activity:
- Designing SLA frameworks
- Determining, documenting and agreeing requirements for new services and producing SLRs
- Negotiating, documenting and agreeing SLAs for operational services
- Monitoring service performance against SLA
- Producing service reports
- Conducting service reviews and instigating improvements within an overall service improvement plan
- Collating, measuring and improving customer satisfaction
- Reviewing and revising SLAs, service scope and underpinning agreements
- Reviewing and revising OLAs, underpinning agreements and service scope
- Developing contacts and relationships
- Handling complaints and compliments

Input: Business strategy, plans and financial plans, and information on its current and future requirements, BIA, Business requirements, policies and constraints from service strategy, The service portfolio and service catalogue, RFCs, CMS, Customer and user feedback

Output: Service reports, Service improvement opportunities for inclusion in the CSI register, SIP, Service quality plan, SLAs, SLRs, OLAs, Reports on OLAs and underpinning contracts, Service review meeting minutes and actions, Revised requirements for underpinning contracts

Service Catalogue Management
Goal: To provide and maintain a single source of consistent information on all operational services and those being prepared to be run operationally, and to ensure that it is widely available to those who are authorized to access it.

Activity:
- Agreeing and documenting a service definition and description for each service
- Interfacing with service portfolio management to agree the contents of the service portfolio and service catalogue
- Producing & maintaining an accurate service catalogue & contents
- Interfacing with the business and ITSCM on the dependencies of business units
- Interfacing with support teams, suppliers and service asset and configuration management
- Interfacing with BRM and SLM to ensure that the information is aligned to the business and business process

Input: Business information from the organization's business and IT strategy, plans and financial plans, Business Impact Analysis, changes to service requirements, Business requirements, Service Portfolio, CMS, Feedback from all other processes

Output: The documentation and agreement of a 'definition of the service', Updates to the Service Portfolio: should contain the current status of all services and requirements for services, The Service Catalogue

Supplier Management
Goal: Ensure that suppliers and the services they provide are managed to support IT service targets and business expectations. To raise awareness of the business context of working with partners and suppliers. Realise business benefit for the organization.

Activity:
- Definition of new supplier and contract requirements
- Evaluation of new suppliers and contracts
- Supplier categorization and maintenance of the supplier and contract management information system
- Establishment of new suppliers and contracts
- Supplier, contract and performance management
- Contract renewal or termination

Input: Business information: from the organization's business strategy, plans and financial plans, and information on their current and future requirements, Supplier and contracts strategy, Supplier plans and strategies, Supplier contracts, agreements and targets, budgets

Output: SCMIS, Supplier and contract performance information and reports, Supplier and contract review meeting minutes, Supplier SIPs, Supplier survey reports

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Service Transition

Service Transition Planning & Support
Goal: To provide overall planning for service transitions and to coordinate the resources that they require. Plan and coordinate the resources to ensure that the requirements of service strategy encoded in service design are effectively realized in service operation.

Activity:
- Establish the Transition strategy
- Establish the Service transition lifecycle stages
- Prepare for service transition
- Planning and coordinating service transition
- Provide transition process support

Input: Change proposal, Authorized change, Service design package: Release package definition and design specification, Test plans, Deployment plans, Service acceptance criteria (SAC).

Output: Transition strategy and budget, Integrated set of service transition plans.

Change Management
Goal: To control the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services. To respond to the customer's changing business requirements while maximizing value and reducing incidents, disruption and re-work.

Activity:
- Overall change management activities:
  - Planning and controlling changes
  - Change and release scheduling (working with release and deployment management when appropriate)
  - Communications
  - Change authorization
  - Ensuring that remediation plans are in place
  - Management reporting
  - Understanding the impact of change
  - Continual improvement
- Typical activities in managing individual changes:
  - Create and record the RFC
  - Review the RFC
  - Filter changes (e.g. incomplete or wrongly routed changes)
  - Assess and evaluate the change
  - Establish the appropriate level of change authority
  - Establish relevant areas of interest (i.e. who is involved in the CAB)
  - Evaluate the business justification, impact, cost, benefits, risks, ...
  - Submit a request for evaluation to initiate change evaluation
  - Authorize the change
  - Obtain authorization/rejection
  - Communicate the decision with all stakeholders and initiator
  - Plan updates
  - Coordinate change implementation
  - Review and close change
  - Collate the change documentation, e.g. baselines and evaluation reports
  - Review the change(s) and change documentation
  - Update service knowledge management system with lessons learned
  - Close the change document when all actions are completed

Input: Policy and strategies for change and release: Request for Change: Change proposal, Plans - change, transition, release, deployment, test, evaluation and remediation, Current change schedule and PSO, CMDB, release package, baseline, Test results, test report

Output: Rejected RFCs, Approved RFCs, Change to the services, service or infrastructure resulting from approved RFCs, CI, Change schedule, Revised PSO, Authorized change plans, Change decisions and actions, Change documents and records, Change Management reports.

Service Asset & Configuration Management
Goal: To ensure that the assets required to deliver services are properly controlled, and that accurate and reliable information about those assets is available when and where it is needed - i.e. details of how the assets have been configured and the relationships between assets.

Activity:
- Management and planning
- Configuration identification
- Configuration control
- Status accounting and reporting
- Verification and audit

Input: Designs, plans and configurations from service design packages, Requests for change and work orders from the change process, Actual configuration information collected by tools and audits, Information in the organization's fixed asset register

Output: New and updated configuration records, Updated asset information for use in updating the fixed asset register, Information about attributes and relationships of configuration items, for use by all other service management processes

Release and Deployment Management
Goal: To plan, schedule and control the build, test and deployment of releases, and to deliver new functionality required by the business while protecting the integrity of existing services.

Activity:
- Release and deployment planning
  - Plans for creating and deploying the release are created
- Release build and test
  - The release package is built, tested and checked into the DML
- Deployment
  - The release package in the DML is deployed to the live environment
- Review and close
  - Experience and feedback are captured, performance targets and achievements are reviewed and lessons are learned

Input: Authorized RFC, Service package, SLP, SDP, including service model and SAC, IT service continuity plan and related business continuity plan, Service Management and operations plans and standards, Technology and procurement standards and catalogues

Output: Release and deployment plan, Completed RFCs for the release and deployment activities, Service notification, Updated service catalogue with the relevant information about the new or changed service, New or changed Service Management documentation

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Service Validation and Testing
Goal: To provide objective evidence that the new/changed service supports the business requirements, including the agreed SLAs.

Activity:
- Validation and test management
- Plan and design tests
- Verify test plans and test design
- Prepare for test environment
- Perform tests
- Evaluate exit criteria and report
- Test clean up and closure

Input: The Service Package, SLP, Service Provider Interface Definition, Service Design Package, Release and Deployment Plans , Acceptance Criteria , RFC

Output: Configuration baseline of the testing environment, Testing carried out (including options chosen and constraints encountered), Results from those tests, Analysis of the results, e.g. comparison of actual results with expected results, risks identified during testing activities

Change Evaluation
Goal: To provide a consistent and standardized means of determining the performance of a service change in the context of likely impacts on business outcomes, and on existing and proposed services and IT infrastructure. Assess against its predicted performance. Identify risks.

Activity:
- Evaluation plan
- Understanding the intended effect of a change
- Understanding the unintended effect of a change
- Factors for considering the effect of a service change
- Evaluation of predicted performance
- Evaluation of actual performance
- Risk management
- Evaluation report

Input: SDP, including service charter and SAC, Change proposal, RFC, change record and detailed change documentation, Discussions with stakeholders, Test results and report

Output: Interim evaluation report(s) for change management, Evaluation report for change management

Knowledge Management
Goal: To share perspectives, ideas, experience and information: to ensure that these are available in the right place at the right time to enable informed decisions; and to improve efficiency by reducing the need to rediscover knowledge.

Activity:
- Establish the Knowledge management strategy
- Establish Knowledge transfer
- Manage data, information and knowledge
- Enable the service knowledge management system

Input: All knowledge, information and data used by the service provider, as well as relevant business data.

Output: knowledge required to make decisions and to manage the IT services, maintained within an SKMS Service Knowledge Management Base, Service Operation and Operations Staff, Problem Management Staff and Transition Staff

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Service Operation

Event Management
Goal: To manage events throughout their lifecycle. To detect events, make sense of them and determine the appropriate control action that is required by the event management process.

Activity:
- Event occurs
- Event notification
- Event detection
- Event logged
- First-level event correlation and filtering
- Significance of events
- Second-level event correlation
- Further action required?
- Response selection
- Review actions
- Close event

Input: Operational and service level requirements associated with events and their actions, Alarms, alerts and thresholds for recognizing events, Event correlation tables, rules, event codes and automated response solutions that will support event management activities

Output: Communication and escalation to those responsible for further action, Event log updates, Incident notification, Events that indicate the potential breach of an SLA or OLA objective, Alerts that indicate completion status, Populated SKMS with event information and history

Incident Management
Goal: To restore normal service operation as quickly as possible and minimize the adverse impact on business operations.

Activity:
- Incident identification
- Incident logging
- Incident categorization
- Incident prioritization
- Initial diagnosis
- Incident escalation
- Investigation and diagnosis
- Resolution and recovery
- Incident closure
- Rules for reopening incidents

Input: Incident record with details sourced from (for example) Service Desk, networks or computer operations, Configuration details from the Configuration Management Database (CMDB), Response from Incident matching against Problems and Known Errors, Resolution details

Output: RFC for Incident resolution; Incident record (including resolution and/or Work-around); Resolved and closed Incidents; Communication to Customers; Management information (reports)

Request Fulfillment
Goal: Responsible for managing the lifecycle of all service requests from the users. Maintain user and customer satisfaction through efficient and professional handling of all service requests.

Activity:
- Receive request
- Request logging and validation
- Request categorization
- Request prioritization
- Request authorization
- Request review
- Request model execution
- Request closure
- Rules for reopening requests

Input: Work requests, Authorization forms, Service requests, RFCs, Requests from various sources such as phone calls, web-interfaces or email, Request for information

Output: Authorized/rejected service requests, Updated request status reports, Fulfilled service requests, Incidents (rerouted), RFCs/standard changes, Asset/CI updates, Updated request records, Closed service requests, Cancelled service requests.

Problem Management
Goal: To minimize the adverse impact of incidents and problems on the business that are caused by underlying errors within the IT infrastructure, and to proactively prevent recurrence of incidents related to these errors. Determine the root cause of incidents and initiate actions to improve.

Activity:
- Problem detection
- Problem logging
- Problem categorization
- Problem prioritization
- Problem investigation and diagnosis
- Workarounds
- Raising a known error record
- Problem resolution
- Problem closure
- Major problem review

Input: Incident Records via recurring incidents, Request Fulfillment feedback and metrics. All proactive Service Lifecycle processes such as Capacity, Availability Management

Output: Resolved problems and actions taken to achieve their resolution, Updated problem management records, RFCs to remove infrastructure errors, Workarounds for incidents, Known error records, Problem management reports, improvement recommendations

Access Management
Goal: To provide the rights for users to be able to use a service or group of services. The execution of policies and actions defined in information security management.

Activity:
- Request access
- Verification
- Provide rights
- Check and monitor identity status
- Log and track access
- Remove or restrict rights

Input: Authorized requests for access (from service design), Operational and service level requirements , performing access management administrative activities and responding to access management related events, Authorized RFCs to access rights, Authorized requests

Output: Provision of access to IT services in accordance with information security policies: Access management records and history of access granted to services: Access management records and history where access has been denied

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Continual Service Improvement

Continual Service Improvement Approach
Goal: To align IT with the business. To assist with decision-making on what improvement initiatives make sense and add the greatest value back to the business.

Activity:
- Determine the vision
  - To understand what the ultimate and long term aims are
- Determine where we are now
  - Create a baseline of data for services currently being delivered
- Determine where we want to be
  - This is often expressed as business requirements
- Determine how to get there
  - The improvement initiatives are required in the short, medium and long term? These initiatives should be logged in the CSI register
- Determine if we got there
  - This is documented through monitoring, reporting and reviewing of service level achievements and actual performance against targets identified by the business requirements

Input/Output: Business vision, mission, goals and objectives, Baseline assessments, Measurable targets, Service & process improvement, Measurements & metrics, CSI Register

Deming Cycle - Plan Do Check Act
Goal: The goal in using the Deming Cycle is steady, ongoing improvement. It is a fundamental tenet of Continual Service Improvement.

Activity:
- Plan: Establishes goals for improvement including gap analysis, definition of action steps to close the gap and establishing and implementing measures to assure that the gap has been closed and benefits achieved
- Do: Development and implementation of a project to close the gap. Implementation or improvement of processes and establishing the smooth operation of the process
- Check: Comparison of the implemented environment to the measures of success established in Plan phase. The comparison determines if a gap still exists between the improvement objectives of the process and the operational process step
- Act: The decision process to determine if further work is required to close remaining gaps, allocation of resources necessary to support another round of improvement

Input/Output: Business vision, mission, goals and objectives, Baseline assessments, Measurable targets, Service & process improvement, Measurements & Metrics, CSI Register

Seven Step Improvement Process
Goal: To collect, analyze, process relevant metrics from a process in order to determine its weakness and establish an action plan to improve the process.

Activity:
- Step 1 - Identify the strategy for improvement
- Step 2 - Define what you will measure
- Step 3 - Gather the data
- Step 4 - Process the data
- Step 5 - Analyse the information and data
- Step 6 - Present and use the information
- Step 7 - Implement improvement

Input: Knowledge gained from presenting and using the information, Agreed implementation plans (from Step 6), A CSI register for those initiatives that have been initiated from other sources.

Output: Service catalogue, SLRs, The service review meeting, Vision and mission statements, Corporate, divisional and departmental goals and objectives, Legislative requirements, Governance requirements, Budget cycle, Customer satisfaction surveys, CSI Register

Service Measurement and Reporting
Goal: To monitor services and report on improvement opportunities

Activity:
- Service Measurement
  - Objective (Availability, Reliability, Performance of the Service)
  - Developing a Service Measurement Framework
  - Different levels of measurement and reporting
  - Defining what to measure
  - Setting targets
  - Service management process measurement
  - Creating a measurement framework grid
  - Interpreting and using metrics
  - Interpreting metrics
  - Using measurement and metrics
  - Creating scorecards and reports
  - CSI policies
- Service Reporting
  - Reporting policy and rules

Input: SLA Targets, SLRs, OLAs, Contracts

Output: Service Improvement Program, SLAM Reports, CSI Register

SWOT Analysis
Goal: To develop a strategic planning tool used to evaluate the internal strengths, weaknesses, and external opportunities and threats involved in a project, business venture or any other situation requiring a decision. To provide a quick overview of a firm's strategic situation.

Activity:
- Strengths
  - Internal attributes of the organization that are helpful to the achievement of the objective.
- Weaknesses
  - Internal attributes of the organization that are harmful to the achievement of the objective.
- Opportunities
  - External conditions that are helpful to the achievement of the objective.
- Threats
  - External conditions that are harmful to the achievement of the objective.

Input: Core competencies, Financial resources, competition, technology, cost, facilities, distribution network, new market or segments, substitutes, regulations

Output: SWOT Report, CSI Register

Functions

Service Desk
Goal: To act as the primary point of contact for users when there is a service disruption, for service requests or for some categories of Request for Change. The Service Desk provides a point of communication to the users and a point of coordination for several IT groups and processes.

Activity:
- Logging all relevant incident/service request details, allocating category and priority codes
- Providing first-line investigation and diagnosis
- Resolving those incidents/service requests they are able
- Escalating incidents/service requests that they cannot resolve within agreed timescales
- Keeping users informed of progress
- Closing all resolved incidents, requests and other calls
- Conducting customer/user satisfaction callbacks/ surveys as agreed
- Communication with users
- Updating the CMS under the direction and approval of Configuration Management

Input: Incident Record, Problem Record, Known Error Data, Change Schedule, Sources of internal knowledge (especially technical or application sources), SKMS, CMS, Alerts from monitoring tools, SL Targets in SLAs, OLAs, UCs.

Output: Customer/User Satisfaction Surveys, Service Desk Metrics, Super-user updates, training, communication with users.

IT Operations Management
Goal: To provide daily operational activities needed to manage the IT Infrastructure. It has two sub-functions: IT Operations Control and Facilities Management

Activity:
- IT Operations Management
  - Function responsible for the daily operational activities needed to manage the IT Infrastructure. This is done according to the Performance Standards defined during Service Design. There are two sub-functions:
- IT Operations Control
  - Generally staffed by shifts of operators and which ensures that routine operational tasks are carried out. IT Operations Control will also provide centralized monitoring and control activities, usually using an Operations Bridge or Network Operations Centre.
- Facilities Management
  - The management of the physical IT environment, Data Centers or computer rooms. Often Technical and Application Management are co-located with IT Operations in larger Data Centers.

Input: Backup and Restore, Monitoring tools and agents, Remote desktop tools, HVAC, Surveillance cameras, access card readers

Output: Standard Operation Procedures (SOP), Operations Logs, Shift Schedules and Reports, Operations Schedule, IT Operations Management metrics

Technical Management
Goal: To provide detailed technical skills and resources needed to support the ongoing operation of the IT infrastructure. Technical Management also plays an important role in the design, testing, release and improvement of IT services.

Activity:
- IT Operations Management
  - Mainframe, Server, Network, Storage, Database, Directory Services, Desktop, Middleware, Web
  - Custodian of technical knowledge and expertise related to managing the IT infrastructure.
  - Ensures that the knowledge required to design, test, manage and improve IT services is identified, developed and refined.
  - Provides the actual resources to support the ITSM lifecycle
  - These resources are effectively trained and deployed to design, build, transition, operate and improve the technology to deliver and support IT services.
  - Identifying the knowledge and expertise required to manage and operate the IT Infrastructure and to deliver IT services
  - Documentation of the skills that exist in the organization
  - Design and delivery of training for users, the Service Desk and other groups

Input: Service Portfolio, Service Pipeline, Service Catalogue, SLP, SDP, LOS, Service Acceptance Criteria, RFC, CMDB, CMS, SKMS, AMIS, CMIS

Output: Measurement of agreed outputs, process metrics, metrics, Mean Time Between Failures of specified equipment, Measurement of maintenance activity, Training and skills development

Application Management
Goal: To manage applications throughout their lifecycle. The Application Management function supports and maintains operational applications and Application Development plays an important role in the design, testing, release and improvement of applications of IT service.

Activity:
- Determine whether to buy an application or build it
- Maintain and develop applications
- It is the custodian of technical knowledge and expertise related to managing applications. In this role Application Management, working together with Technical Management, ensures that the resources required to design, test, manage and improve IT services are identified
- It provides the actual resources to support the ITSM lifecycle. In this role, Application Management ensures that resources are effectively trained and deployed to design, build, transition, operate and support IT services
- Application Management Lifecycle: Requirements, Design, Build, Deploy, Operate, Optimize
- Identifying the knowledge and expertise
- Recruiting or contracting resources

Input: Software Development tools, Installation and Distribution tools, Testing tools

Output: Measurement of agreed outputs, Process metrics, Application performance, Measurement of maintenance activity, Application Portfolio, Application Requirements