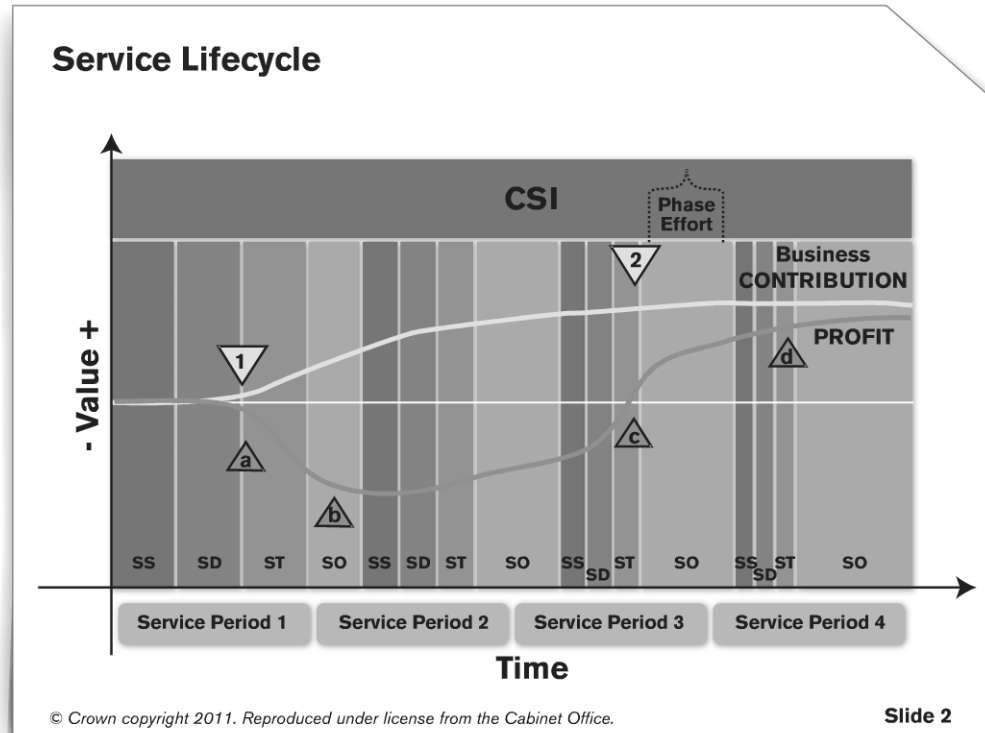


6

Continual Service Improvement





Service Lifecycle

This module provides the details of Continual Service Improvement (CSI). CSI focuses on improving the services of the IT organization as well as the internal processes.

Once an organization has gone through the process of identifying what its services are, as well as developing and implementing the IT Service Management (ITSM) processes to enable those services, many believe that the hard work is complete. How wrong they are! The real work is only just beginning. How do organizations get buy-in for using the new processes? How do organizations measure, report and use the data to improve not only the new processes but to continually improve the services being provided? This requires a conscious decision to adopt CSI with clearly defined goals, documented procedures, inputs, outputs and identified roles and responsibilities. To be successful, each organization must embed CSI within its culture.

The Service Lifecycle is a comprehensive approach to Service Management—seeking to understand its structure, the interconnections between all its components, and how changes in any area will affect the whole system and its constituent parts over time. It is an organizing framework designed for sustainable performance.

The Service Lifecycle may be viewed in a graphical manner, where it is easy to demonstrate the value provided, both in terms of “business contribution” and “profit.” The **business contribution** is the ability for an IT organization to support a business process, managing the IT service at the requested performance. The **profit** is the ability to manage cost of service with relation to the business revenue. The Service Lifecycle may be viewed as a phased lifecycle, where the phases are:

- Defining strategy for the IT Service Management (Service Strategy [SS])
- Designing the services to support strategy (Service Design [SD])
- Implementing the services in order to meet the designed requirements (Service Transition [ST])
- Supporting the services that manage the operational activities (Service Operation [SO])

The interaction between phases are managed through the Continual Service Improvement approach, which is responsible for measuring and improving service and process maturity levels.

After the completion of all phases, a service period is concluded and another service period begins.

The Continual Service Improvement phase is involved during all phases of the Service Lifecycle. It is responsible for measuring the service and the processes, (Service Measurement), and to document the results (Service Reporting) in order to improve the service quality and the processes maturity (Service Improvement).

These improvements will be implemented within the next period of Service Lifecycle, starting again with Service Strategy. This is followed by Service Design and Service Transition. The Service Operation phase of course continues to manage operations during all service periods.

With the evolution of the service periods, the “effort” for each phase will be reduced concerning the strategic and tactical phases (SS, SD and ST). At this stage the SO phase is optimized and takes the primary role. At each cycle of the service (service period) the service will be improved with the result of increasing the value of business and of maximizing the profits.

In terms of business contribution, the IT service begins to be valuable when the first step of the Service Transition starts (see triangle “1” on the picture).

In terms of profits, the major investments are required with the big implementation project (ST) (see triangle “a”). When the transition is complete and the operations start, the service begins to support business process and the new revenues balance the costs (see triangle “b”). After some periods of service optimization the “Profit & Loss” start to be profitable and reach the “break even point” (see triangle “c”).

After a number of periods (depending of the complexity of the service and the flexibility of the business), the business contribution (see triangle “b”) and the profit (see triangle “d”) will be stabilized, which means that the IT organization has reached the right level of maturity in managing processes and the service has reached the right level of performance in meeting the service level requirements.

Continual Service Improvement – Purpose

- The purpose of Continual Service Improvement is to align and realign IT services to the changing business needs by identifying and implementing improvements to the IT services that support the business processes
- Service standstill means DECLINE

Slide 3

Continual Service Improvement – Purpose

The primary purpose of Continual Service Improvement is to align and realign IT services to the changing business needs by identifying and implementing improvements to the IT services that support the business processes. CSI's perspective on improvement is the business perspective of service quality, even though CSI aims to improve process effectiveness, efficiency and cost effectiveness of the IT processes throughout the whole lifecycle. In order to manage improvement, CSI should clearly define what should be controlled and measured.

CSI must be treated like any other service practice. There must be upfront planning, training and awareness, ongoing scheduling, roles created, ownership assigned, and activities identified in order to be successful. CSI must be planned and scheduled as a process with defined activities, inputs, outputs, roles and reporting.

Continual Service Improvement – Scope

- Services: Alignment of IT services with current/future business needs
 - Throughout the Service Lifecycle
- Processes: Health of ITSM and maturity of the IT processes
 - All levels (Strategic, Tactical and Operational)

Slide 4

Continual Service Improvement – Scope

Continual Service Improvement focuses on two areas:

- Improving the *services offered*, focusing on the alignment of the IT services with the current and future business needs. This improvement focuses on all stages of the Service Lifecycle.
- Improving the *internal processes* and keeping the health of IT Service Management within the company. This focuses on all levels within the organization.

CSI provides value for customers through better design, introduction and operation of services. It combines principles, practices and methods from quality management, Change Management and capability improvement. Organizations learn to realize incremental and large-scale improvements in service quality, operational efficiency and business continuity. Guidance is provided for linking improvement efforts and outcomes with Service Strategy, Service Design and Service Transition.

Continual Service Improvement – Objectives

- Make recommendations for improvements
- Review and analyze SLA results
- Identify and implement activities to improve IT services and processes
- Improve cost effectiveness without sacrificing customer satisfaction
- Choose and employ quality management methods

Slide 5

Continual Service Improvement – Objectives

Continual Service Improvement has many objectives, of which the most important are the following:

- Recommendations on improvements in each lifecycle phase
- Reviewing and analyzing SLA results
- Identifying and implementing activities to improve the quality of services offered, as well as efficiency and effectiveness of the IT Service Management processes
- Improving cost effectiveness, without a reduction in quality (which would thereby lower customer satisfaction)
- Ensuring that quality management methods are in place to maintain the quality levels

Continual Service Improvement Value to Business (1/2)

- Adopting and implementing standard and consistent approaches for CSI will:
 - Lead to a gradual and continual improvement in service quality, where justified
 - Ensure that IT services remain continuously aligned to business requirements
 - Result in gradual improvements in cost effectiveness through a reduction in costs and/or the capability to handle more work at the same cost
 - Use monitoring and reporting to identify opportunities for improvement in all lifecycle stages and in all processes

Slide 6

Continual Service Improvement Value to Business

Adopting and implementing standard and consistent approaches for CSI will:

- Lead to a gradual and continual improvement in service quality, where justified.
- Ensure that IT services remain continuously aligned to business requirements.
- Result in gradual improvements in cost effectiveness through a reduction in costs and/or the capability to handle more work at the same cost.
- Use monitoring and reporting to identify opportunities for improvement in all lifecycle stages and in all processes.
- Identify opportunities for improvements in organizational structures, resourcing capabilities, partners, technology, staff skills & training, and communications.

Continual Service Improvement Value to Business (2/2)

- Identify opportunities for improvements in organizational structures, resourcing capabilities, partners, technology, staff skills & training, and communications

Slide 7

CSI Register (1/2)

- It is likely that several initiatives or possibilities for improvement can be identified. It is recommended that a CSI register is kept to record all the improvement opportunities and that each one should be categorized into small, medium or large undertakings
- The CSI register contains important information for the overall service provider and should be held and regarded as part of the Service Knowledge Management System (SKMS)

Slide 8

CSI Register (1/2)

It is likely that several initiatives or possibilities for improvement can be identified. It is recommended that a CSI register is kept to record all the improvement opportunities and that each one should be categorized into small, medium or large undertakings. Additionally they should be categorized into initiatives that can be achieved quickly, or in the medium term or longer term. Each improvement initiative should also show the benefits that will be achieved by its implementation. With this information a clear prioritized list can be produced. One failing that has been observed is when something has been identified as a lower priority it never makes its way higher up the list for a further consideration, so automated raising of priorities over time may be a useful addition to the register.

The CSI register contains important information for the overall service provider and should be held and regarded as part of the Service Knowledge Management System (SKMS).

CSI Register (2/2)

- The CSI register will introduce a structure and visibility to CSI ensuring that all initiatives are captured and recorded, and benefits realized
- The CSI register provides a coordinated, consistent view of the potentially numerous improvement activities
- The CSI manager should have accountability and responsibility for the production and maintenance of the CSI register

Slide 9

CSI Register (2/2)

The CSI register will introduce a structure and visibility to CSI ensuring that all initiatives are captured and recorded, and benefits realized. Additionally the benefits will be measured to show that they have given the desired results. In forecasting the benefits of each proposed improvement we should also try to quantify the benefit in terms of aspirational key performance indicator (KPI) metrics.

This will assist in prioritizing those changes that deliver the most significant incremental benefit to the business.

The CSI register provides a coordinated, consistent view of the potentially many improvement activities. It is important to define the interface from the CSI register of initiatives with strategic initiatives and with processes such as problem management, capacity management and change management. In particular the service review meeting is likely to result in a number of requirements for improvement.

The CSI manager should have accountability and responsibility for the production and maintenance of the CSI register.

Continual Service Improvement – Models and Processes

- Deming Cycle (Plan-Do-Check-Act)
 - Basis of quality management and improvement
- Continual Service Improvement Model
 - High-level approach for Continual Service Improvement

The following pages will discuss these models

Slide 10

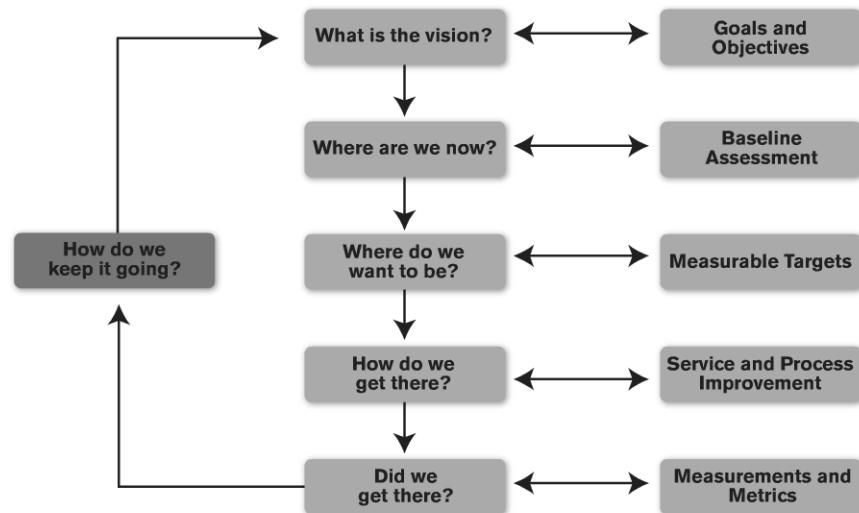
Continual Service Improvement – Models and Processes

In Continual Service Improvement, several **approaches** and **processes** are identified to support the improvement of services and processes.

The Deming Cycle (commonly known as Plan-Do-Check-Act, based upon the steps to be taken), is a basis for quality management and improvement.

The Continual Service Improvement Model is a high-level approach for improving IT Service Management.

The following pages will discuss these models.

CSI Model

© Crown copyright 2011. Reproduced under license from the Cabinet Office.

Slide 11

CSI Model

Before CSI can provide the IT organization with improvement plans and programs that are aligned with the vision and the strategy, information about the current situation must be available. Before we are able to go somewhere we must know where we are now. Measurement gives insight into the current situation and it is critically important to know what to measure.

Activities that provide insight into the actual situation may include:

- Reviewing management information and Service Level Reports
- Conducting maturity assessments
- Performing internal audits concerning employee and process compliance
- Reviewing deliverables
- Conducting customer satisfaction surveys
- Conducting service reviews

Information is provided by all the processes in every lifecycle.

A baseline establishes starting points for later comparison and may also be used to initially determine if a service or a process should be improved. It is important that the baselines are documented, recognized and accepted (and not open for interpretation). Baselines must be established on each level: strategic goals and objectives, tactical process maturity and operational metrics and KPIs.

From the baseline, the next step is to agree upon the priorities for improvement, define the specific goals and to set targets. Next is the development of a detailed CSI plan and implementation of the ITSM processes. Then, verify that measurements and metrics are in place and that objectives are achieved. After implementing improvement, communication is crucial in order to ensure that a change will be embedded within the organization.

Seven Step Improvement Process – Purpose (1/2)

- The purpose of the seven-step improvement process is to define and manage the steps needed to identify, define, gather, process, analyse, present and implement improvements
- The objectives of the seven-step improvement process are to:
 - Identify opportunities for improving services, processes, tools etc.
 - Reduce the cost of providing services and ensuring that IT services enable the required business outcomes to be achieved

Slide 12

Seven Step Improvement Process – Purpose (1/2)**Purpose and objectives**

The purpose of the seven-step improvement process is to define and manage the steps needed to identify, define, gather, process, analyse, present and implement improvements.

The objectives of the seven-step improvement process are to:

- Identify opportunities for improving services, processes, tools etc.
- Reduce the cost of providing services and ensuring that IT services enable the required business outcomes to be achieved. A clear objective will be cost reduction, but this is not the only criterion. If service delivery or quality reduces as a result the overall impact may be neutral or even negative.

Seven Step Improvement Process – Purpose (2/2)

- Identify what needs to be measured, analysed and reported to establish improvement opportunities
- Continually review service achievements to ensure they remain matched to business requirements; continually align and re-align service provision with outcome requirements
- Understand what to measure, why it is being measured and carefully define the successful outcome

Slide 13

Seven Step Improvement Process – Purpose (2/2)

- Identify what needs to be measured, analysed and reported to establish improvement opportunities.
- Continually review service achievements to ensure they remain matched to business requirements; continually align and re-align service provision with outcome requirements.
- Understand what to measure, why it is being measured and carefully define the successful outcome.

It is important to note that improvements in quality should not be implemented if there is a cost associated for the improvement and if this cost has not been justified. Every potential improvement opportunity will have to have a business case justification to show that the business will have an overall benefit. For small initiatives the business case does not have to be a full blown report but could be a simple justification. The seven-step improvement process is not free-standing and will only achieve its desired outcomes when applied to technology, services, processes, organization or partners.

Seven Step Improvement Process – Scope (1/2)

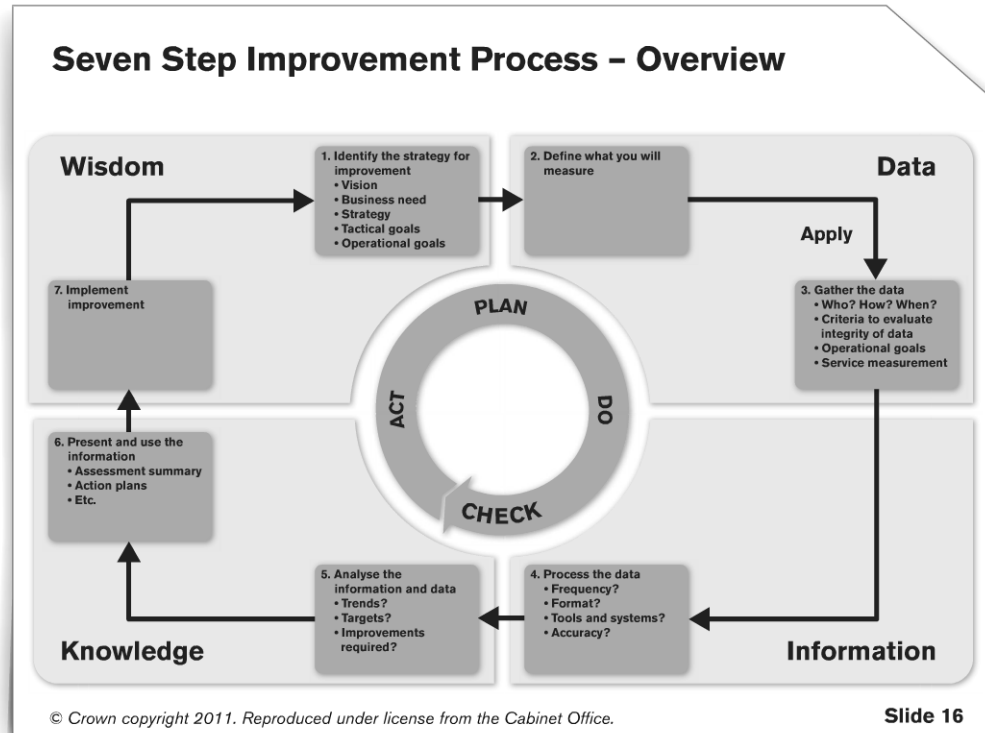
- The seven-step improvement process includes analysis of the performance and capabilities of services, processes throughout the lifecycle, partners and technology
- It includes the continual alignment of the portfolio of IT services with the current and future business needs as well as the maturity of the enabling IT processes for each service

Slide 14

Seven Step Improvement Process – Scope (1/2)

- It also includes making best use of the technology that the organization has and looks to exploit new technology as it becomes available where there is a business case for doing so
- Also within the scope are the organizational structure, the capabilities of the personnel, and asking whether people are working in appropriate functions and roles, and if they have the required skills

Slide 15



Seven Step Improvement Process – Overview

This is a cornerstone of CSI, the main steps of which are as follows:

Identify the strategy for improvement

Identify the overall vision, business need, the strategy and the tactical and operational goals

Define what you will measure

Service strategy and service design should have identified this information early in the lifecycle. CSI can then start its cycle all over again at 'Where are we now?' and 'Where do we want to be?' This identifies the ideal situation for both the business and IT. CSI can conduct a gap analysis to identify the opportunities for improvement as well as answering the question 'How do we get there?'

Gather the data

In order to properly answer the question 'Did we get there?', data must first be gathered (usually through service operations). Data can be gathered from many different sources based on goals and objectives identified. At this point the data is raw and no conclusions are drawn.

Process the data

Here the data is processed in alignment with the critical success factors (CSFs) and KPIs specified. This means that timeframes are coordinated, unaligned data is rationalized and made consistent, and gaps in the data are identified. The simple goal of this step is to process data from

multiple disparate sources to give it context that can be compared. Once we have rationalized the data we can begin analysis.

Analyse the information and data

As we bring the data more and more into context it evolves from raw data into information where we can start to answer questions about who, what, when, where and how as well as trends and the impact on the business. It is the analyzing step that is most often overlooked or forgotten in the rush to present data to management.

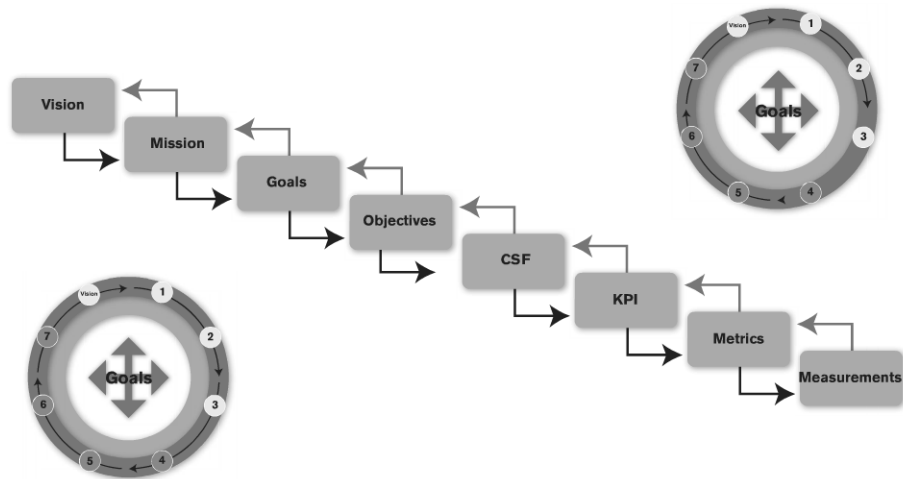
Present and use the information

Here the answer to 'Did we get there?' is formatted and communicated in whatever way necessary to present to the various stakeholders an accurate picture of the results of the improvement efforts. Knowledge is presented to the business in a form and manner that reflects their needs and assists them in determining the next steps.

Implement improvement

The knowledge gained is used to optimize, improve and correct services and processes. Issues have been identified and now solutions are implemented –wisdom is applied to the knowledge. The improvements that need to be taken to improve the service or process are communicated and explained to the organization. Following this step the organization establishes a new baseline and the cycle begins anew.

From Vision to Measurements



© Crown copyright 2011. Reproduced under license from the Cabinet Office.

Slide 17

From Vision to Measurements

The first three steps of the Seven Step Improvement Process exist to narrow down from the vision to the actual measurements. By ensuring that the motives for measuring are top-down, it may be linked to business objectives, without focusing only on percentages.

The last four steps of the Seven Step Improvement Process use the raw measurements and translate them bottom-up into an improvement of the service by linking the measurements to the goals and objectives, and in the end the vision and mission of the service or process.

Why do we measure?

- Validate decisions
- Direct activities
- Justify courses of action
- Identify points of intervention

Slide 18

Why do we measure?

- To validate previous decisions
- To set direction for activities in order to meet set targets. (This is the most prevalent reason for monitoring and measuring.)
- To justify, with factual evidence or proof, that a course of action is required
- To identify a point of intervention, including subsequent changes and corrective actions

It will be important to sift through large amounts of raw data before synthesizing the proper information. This information must then be analyzed and studied, but against what? This is where the different layers of management become important: strategic, tactical and operational, each with their own goals, objectives, Critical Success Factors (CSFs) and Key Performance Indicators (KPIs)—all of which must be aligned and supportive of each other but, more importantly, aligned with the goals and objectives of the business. The ability to derive any meaningful information from the data collected depends not only on the maturity of the processes, but also on the level of maturity of the services provided by IT.

Measurement and Metrics (1/4)

- Key Performance Indicator (KPI)
- Critical Success Factor (CSF)
- Baselines

Slide 19

Measurement and Metrics (1/4)

KPIs are Key Performance Indicators defined during Service Design and Service Transition. The most tangible benefit to organizations using ITIL is a marked improvement in resource utilization, eliminating redundant effort, decreasing errors and the amount of work that must be redone and increasing scalability with current resource levels. In addition, the ITIL framework helps improve the availability, reliability, stability and security of mission-critical IT services by providing demonstrable performance indicators to measure and justify the cost of Service quality. The provision of KPIs is essential to supporting CSI. These KPIs become the data inputs to analyze and identify improvement opportunities.

An important aspect to consider is whether a KPI is fit for use. Key questions are:

- What does the performance indicator really tell us about goal achievement? If we fail to meet the target set for a performance indicator, does that mean we fail to achieve some of our goals? And if we succeed in meeting certain targets, does this mean we will achieve our goals?
- How easy is it to interpret the performance indicator? Does it help us to decide on a course of action?
- When do we need the information? How often? How rapidly should the information be available?

- To what extent is the performance indicator stable and accurate? Is it sensitive to external, uncontrollable influences? What amount of effort is needed for a change in result that is not marginal?
- How easy is it to change the performance indicator itself? How easy is it to adapt the measurement system to changing circumstances or changes in our goals with respect to IT service provision?
- To what extent can the performance indicator be measured now? Under which conditions can measurement continue? Which conditions impede measurement? Which conditions render the result meaningless?
- Who owns this KPI? Who is responsible for collecting and analyzing the data? Who is accountable for improvements based on the information?

CSFs are Critical Success Factors that determine the success or failure of a Service Strategy. How will the Service Provider know when it is successful? When must those factors be achieved? CSFs are defined in terms of capabilities and resources, are proven to be key determinants of success by industry leaders, are defined by the market, are the basis of competition, are dynamic, usually require investment and time to develop, and the value is extracted in combination with other factors.

An important beginning point for highlighting improvement is to establish baselines as markers or starting points for later comparison. Baselines are also used to establish an initial data point to determine if a service or process should be improved. As a result, it is important that baselines are documented, recognized and accepted throughout the organization. Baselines must be established at each level: strategic goals and objectives, tactical process maturity and operational metrics and KPIs.

Measurement and Metrics (2/4)

- CSF All improvement opportunities identified
 - KPI Percentage improvement in defects; for example, 3% reduction in failed changes; 10% reduction in security breaches
- CSF The cost of providing services is reduced
 - KPI Percentage decrease in overall cost of service provision; for example, 2.5% reduction in the average cost of handling an incident; 5% reduction in the cost of processing a particular type of transaction

Slide 20

Measurement and Metrics (2/4)

Each organization should identify appropriate CSFs based on its objectives for the process. Each sample CSF is followed by a typical KPI that supports the CSF. These KPIs should not be adopted without careful consideration. Each organization should develop KPIs that are appropriate for its level of maturity, its CSFs and its particular circumstances. Achievement against KPIs should be monitored and used to identify opportunities for improvement, which should then be logged in the CSI register for evaluation and possible implementation.

Note that because of the nature of the seven-step improvement process, it has to be applied to appropriate processes, activities, technology, organizational structure, people and partners for the benefits to be realized. This means that the KPIs used to judge the success of the seven-step improvement process are actually the KPIs from the other lifecycle stages and processes to which it has been applied. As a result the examples given here come from other areas.

CSF All improvement opportunities identified

KPI Percentage improvement in defects; for example, 3% reduction in failed changes; 10% reduction in security breaches

CSF The cost of providing services is reduced

KPI Percentage decrease in overall cost of service provision; for example, 2.5% reduction in the average cost of handling an incident; 5% reduction in the cost of processing a particular type of transaction

Measurement and Metrics (3/4)

- CSF The required business outcomes from IT services are achieved
 - KPI A 3% increase in customer satisfaction with the service desk; 2% increase in customer satisfaction with the warranty offered by the payroll service

Slide 21

Measurement and Metrics (3/4)

CSF The required business outcomes from IT services are achieved

KPI A 3% increase in customer satisfaction with the service desk; 2% increase in customer satisfaction with the warranty offered by the payroll service.

Measurement and Metrics (4/4)

- Types of metrics:
 - Technology
 - Process
 - Service metrics
- Service measurement

Slide 22

Measurement and Metrics (4/4)

To support CSI activities we will need **three types of metrics**:

Technology metrics: Component- and application-based metrics (performance, availability etc.)

Process metrics: CSFs (Critical Success Factor) and KPIs (metrics that indicate the overall health of a process)

Service metrics: Metrics that indicate the result of the end-to-end service. Technology metrics are inputs for service metrics. Service monitoring identifies weak areas in order for improvement action to be taken.

Service measurement reports the performance of the end-to-end service. One of CSI's key set of activities is to measure, analyze and report on IT services and ITSM results. Measurements will, of course, produce data. This data should be analyzed over time to produce a trend. The trend will tell a story that may be good or bad. It is essential that measurements of this kind have ongoing relevance. What was important to know last year may no longer be pertinent this year. As part of the measuring process, it is important to regularly confirm that the data being collected and compiled is still required, and that measurements are adjusted where necessary. This responsibility falls on the owner of each report or dashboard. Owners are the individuals designated to keep the reports useful and to make sure that action is being taken.

Activities

- Review management information
- Analyze trends
- Produce/analyze SLA reports
- Conduct maturity assessments
- Conduct internal audits
- Conduct customer satisfaction surveys
- Conduct external and internal service reviews to identify CSI opportunities

Slide 23

Activities

The CSI activities above do not happen automatically. They must be owned within the IT organization. They must also be planned for and scheduled on an ongoing basis. By default, "improvement" becomes a process within IT with defined activities, inputs, outputs, roles and reporting. CSI must ensure that ITSM processes are developed and deployed in support of an end-to-end Service Management approach to business customers. It is essential to develop an ongoing continual improvement strategy for each of the processes as well as the services. The deliverables of CSI must be reviewed on an ongoing basis to verify completeness, functionality, and feasibility to ensure that they remain relevant and do not become stale and unusable. It is also important to ensure that monitoring of quality indicators and metrics will identify areas for process improvement. Since any improvement initiative will more than likely necessitate changes, specific improvements will need to follow the defined ITIL Change Management process.

Roles in CSI – CSI Manager

- Responsible for the success of all improvement activities
 - Defines, monitors, analyzes and reports on KPIs and CSFs in cooperation with service level manager
 - Coordinates CSI activities throughout lifecycle
 - Responsible for Knowledge Management
 - Prioritizes improvement opportunities
 - Leads, manages and delivers improvement projects

Slide 24

Roles in CSI – CSI Manager

The CSI manager role is essential for a successful improvement program. The CSI “owner” is ultimately responsible for the success of all improvement activities. This single point of accountability coupled with competence and authority greatly enhances the chances for a successful improvement program.

The **CSI manager** has many **responsibilities**:

- Responsible for development of the CSI domain and the communication of the vision of CSI across the IT organization
- Ensures that CSI roles have been filled
- Works with the service owner to identify and prioritize improvement opportunities and sets direction and provides framework through which improvement objectives can be delivered
- Works with the service level manager to ensure that monitoring requirements are defined and that Service Improvement Programs are identified
- Ensures that monitoring tools are in place to gather data and that baseline data is captured against which improvement is measured
- Defines and reports on CSI Critical Success Factors, Key Performance Indicators and CSI activity metrics
- Identifies other frameworks, models and standards that will support CSI activities

- Ensures that Knowledge Management is an integral part of the day-to-day operations
- Ensures that CSI activities are coordinated throughout the Service Lifecycle
- Reviews analyzed data and presents recommendations to senior management for improvement
- Helps prioritize improvement opportunities
- Leads, manages and delivers cross-functional and cross-divisional improvement projects
- Builds effective relationships with the business and IT senior managers
- Identifies and delivers process improvements in critical business areas

Roles in CSI – Service Owner

- Accountable for a specific service
- Closely related to Service Level Manager and CSI Manager

Slide 25

Roles in CSI – Service Owner

The Service Owner is accountable for a specific service within an organization regardless of where the underpinning technology components, processes or professional capabilities reside. Service ownership is as critical to Service Management as establishing ownership for processes that cross multiple vertical silos or departments.

Key responsibilities:

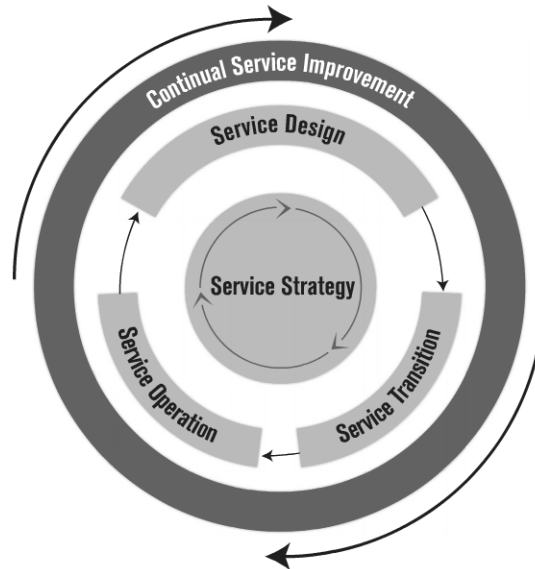
- Service owner of a specified service
- Provides input in service attributes such as performance, availability, etc.
- Represents the service across the organization
- Understands the service (components, etc.)
- Point of escalation (notification) for major Incidents
- Represents the service in Change Advisory Board (CAB) meetings
- Provides input to CSI
- Participates in internal service review meetings (within IT)
- Works with the CSI manager to identify and prioritize service improvement
- Participates in external service review meetings (with the business)

- Ensures that the service entry in the Service Catalog is accurate and is maintained
- Participates in negotiating SLAs and OLAs

To ensure that a service is managed with a business focus, the definition of a single point of accountability is essential to provide the level of attention and focus required for its delivery.

The service owner is responsible for continual improvement and the management of change affecting the services under his care. The service owner is a primary stakeholder in all of the underlying IT processes that enable or support the service he owns.

Continual Service Improvement – Interfaces



© Crown copyright 2011. Reproduced under license from the Cabinet Office.

Slide 26

Continual Service Improvement – Interfaces

For CSI to be successful, it is important to provide improvement opportunities throughout the entire Service Lifecycle. There is much greater value to the business when CSI takes a holistic approach throughout the entire lifecycle. The connection point between each of the core volumes is the Service Portfolio. It is the “spine” that connects the lifecycle stages to each other.

Relation with Service Strategy:

Service improvement opportunities could be driven by external factors such as new security or regulatory requirements, new strategies due to mergers or acquisitions, changes in technology infrastructure or even new business services to be introduced.

Relation with Service Design:

Service Design takes the strategy and transforms it through the design phase into deliverable IT services. Service Design is responsible for designing a management information framework that defines the need for Critical Success Factors (CSFs), Key Performance Indicators (KPIs), and activity metrics for both the services and the ITSM processes. New strategies, architecture, policies and business requirements will drive the need for CSI within Service Design.

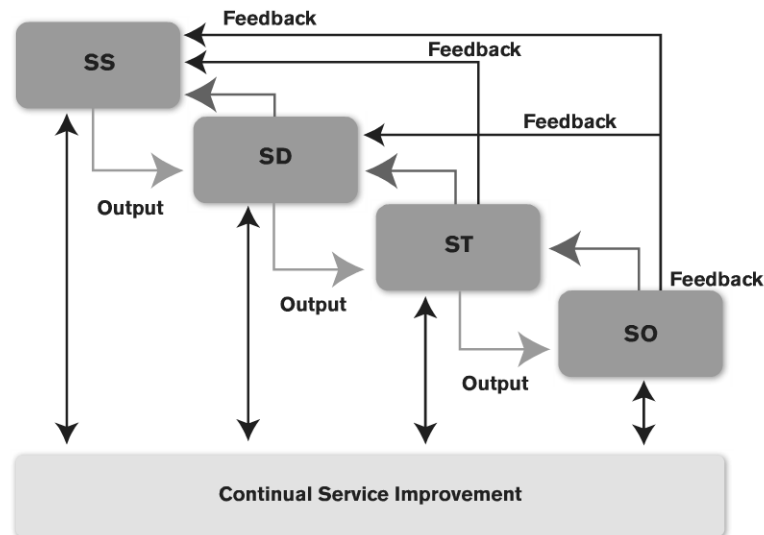
Relation with Service Transition:

Service Transition manages the transition of new or changed services into the production environment. This phase focuses on the best practices of creating support models, a knowledge

base, workflow management and developing communication for use in the transitioning of services to production. As new strategies and designs are introduced, this provides an excellent opportunity for CSI. Service Transition is also responsible for defining the actual CSFs, KPIs and activity metrics, creating the reports and implementing the required automation to monitor and report on the services and ITSM processes.

Relation with Service Operation:

Service Operation is responsible for the monitoring and initial reporting related to the people, processes and infrastructure technology necessary to ensure a high quality, cost-effective provision of IT services that meet business needs. Every technology component and process activity should have defined inputs and outputs that may be monitored. The results of the monitoring may then be compared against the norms, targets or established SLA. When there is a discrepancy between what was expected and what was actually delivered, it becomes a service improvement opportunity. Within the Service Operation phase of the lifecycle, internal reviews would be performed to determine the results, what led to these results, and if necessary, recommendations for some level of fine tuning.

Inputs and Outputs

© Crown copyright 2011. Reproduced under license from the Cabinet Office.

Slide 27

Inputs and Outputs

Each lifecycle phase will provide an output to the next lifecycle phase. This same concept applies to CSI. To be effective, CSI requires open and honest feedback from IT staff. Debriefings or activity reviews work well for capturing information about lessons learned such as, “Did we meet the timelines?” and, “Did we provide quality?”

CSI will make extensive use of methods and practices found in many ITIL processes such as Problem Management, Availability Management and Capacity Management used throughout the lifecycle of a service. The use of the outputs in the form of flows, matrices, statistics or analysis reports, will provide valuable insight into the design and operation of services. This information, combined with new business requirements, technology specifications, IT capabilities, budgets, trends and possibly external legislative and regulatory requirements, will be vital to CSI to determine what must be improved, prioritize this information and suggest improvements, if required.

Continual Service Improvement – Interface with Service Level Management

- SLM is critical to CSI
- SLM initiates Service Improvement Programs and Service Quality Plans
- Monitoring and measuring is a joint responsibility of SLM and CSI
- SLM effort is about building and maintaining better relationships between IT and its customers

Slide 28

Continual Service Improvement – Interface with Service Level Management

Adopting the Service Level Management (SLM) process is a key principle of CSI. SLM is no longer optional; today's business demands that IT be driven by the service model. This service orientation of IT toward the business becomes the foundation for the trusted partnership that IT must endeavor to create. Today IT is a core enabler of every critical business process. IT can no longer afford to operate as the "geeks in the basement" but rather must strive to be included in every channel of communication and level of decision making all the way to the boardroom.

Although Service Level Management (SLM) is a process that is found within Service Design, some of the activities are carried out under the umbrella of Continual Service Improvement.

Within Service Design, Service Level Management is concerned with:

- Designing and planning the process
- Determining Service Level Requirements (SLRs)
- Negotiating and agreeing upon SLAs, OLAs and UCs

Within Continual Service Improvement, the activities carried out under Service Level Management are concerned with improving services and processes through constant:

- Monitoring (executed within Service Operation)
- Reporting

- Evaluating
- Improving

Service Improvement Plans

Service Improvement Plans are formal plans to implement improvements to a process or service. They are used to ensure that improvement actions are identified and carried out on a regular basis. The identified improvements may come as a result of:

- Breaches of Service Level Agreements
- Identification of user training and documentation issues
- Weak system testing
- Identified weak areas within internal and external support groups

Risk Management

- Risk is “uncertainty of outcome, whether positive opportunity or negative threat, of actions or events: the combination of likelihood and impact, including perceived importance”
- Changes to the Service Portfolio need an assessment of the risks in relation to the potential benefits
- Failure to take an opportunity is a risk



© Crown copyright 2011. Reproduced under license from the Cabinet Office.

Slide 29

Risk Management

Every organization manages its risk, but not always in a way that is visible, repeatable and consistently applied to support decision-making. The task of risk management is to ensure that the organization makes cost effective use of a risk process that has a series of well defined steps. The aim is to support better decision-making through a good understanding of risks and their likely impact.

There are two distinct phases: **risk planning** and **risk management**.

Risk Planning is concerned with gathering information about exposure to risk so that the organization may make appropriate decisions and manage risk appropriately. **Risk Planning** is split up in two activities, the first “*Identifying the risk*” deals with naming the identified and suspected risks. The second activity “*Analysing the risk*”, deals with quantifying the impact and probability of the risk.

Once the risks have been assessed and documented, they must be managed.

Risk Management ensures that appropriate actions are taken and verifies whether these are working as expected. It involves having processes in place to monitor risks, access to reliable and up-to-date information about risks, the right balance of control in place to deal with those risks, and decision making processes supported by a framework of risk analysis and evaluation. Management also involves the identification, selection and adoption of countermeasures justified by the identified

risks to assets in terms of their potential impact upon services if failure occurs, and the reduction of those risks to an acceptable level. Management of risk covers a wide range of topics, including Business Continuity Management, security, program/project risk management and operational Service Management. These topics must be placed in the context of an organizational framework for the management of risk. Some risk-related topics, such as security, are highly specialized and this guidance provides only an overview of such aspects.

Summary

- Goal and Objectives
- Deming Cycle
- Continual Service Improvement Model
- Metrics
- Baseline
- Interfaces
- CSI Manager Role

Slide 30

Business Case Study

Java Bean Lounge, Ltd.

Global Tea/Coffee Shop

ITIL® v3 Foundation

Introduction

Java Bean Lounge (JBL) of Hastings, England, is a privately owned food and beverage company founded in 1999.

JBL has grown rapidly to become one of the leading tea and coffee retailers on the global stage. JBL's long-term mission is to become the leading purveyor of the finest tea and coffee in the world. Its goal is to become a premier customer-focused and cost-effective global beverage retailer.

During recent years, JBL has expanded substantially to become the fifth most popular tea and coffee retailer in the world. JBL achieved such spectacular growth through internal investment and not through acquisition or merger.

JBL has Major Operations Centers (MOCs) in Dubai, Amsterdam, London, Mumbai, Miami and São Paulo, as well as 1,066 retail outlets worldwide. In each country there is a head office managing local operations, supported by the regional MOC.

Since JBL is privately owned, it operates as a truly independent company, which enables it to respond quickly to market changes and to implement long-term plans, without unnecessary interference or delay.

Management Structure

The Chief Executive Officer is Natasha Wood, who is also the co-founder and president of JBL. The CEO and group directors are based at the Central Head Office, 135 Norman Road, Hastings, England, United Kingdom.

The Group Directors are:

- **Finance and Administration:** Lucas Neill
- **Commercial and Consumer:** George McCartney
- **Retail Business Solutions:** Steve Leigh
- **Logistics and Maintenance:** Eric Clapton
- **Creative Design:** Harry McGuire
- **Human Resources:** Rebecca Lynch
- **Information and Communications Technology (ICT):** Tracey Green (CIO)
- **Sales and Marketing:** Craig Wheeler
- **Press and Public Relations:** Arno Kneipp
- **Convergent Business:** Marius Brink
- **Legal and Regulatory:** Richie Keys

JBL employs 18,235 people worldwide

JBL's Vision

It is JBL's vision to achieve a profit of \$30,000,000 and enhance its position globally to become one of the top three recognizable brands in its market sector within the next three years.

To realize this vision and prepare for competition, JBL has adopted a six-part growth strategy: Optimize returns from the "traditional" products and services throughout the world

1. Develop and deliver value-added services (e.g., through the introduction of Internet cafés into all retail stores).
2. Streamline the management of inventory systems (e.g., development of online ordering systems).
3. Improve productivity.
4. Increase retail footprint controlled through sustainable growth.
5. Transform corporate culture—be creative, be rewarded.

Due to economic conditions, its planned growth target for this year is 9.5%. Last year's profit was \$17,000,000 and the previous year's profit was \$11,000,000.

The JBL MOC Organizational Structure

JBL has created nearly identical organizational structures at each of the MOCs. Regional managers control each MOC and they report directly to the board of directors. They are responsible for all the retail outlets and operational duties within each region. Reporting to the regional manager are line managers who control the following departments:

Logistics

The logistics department's main responsibility is to ensure that all stock required for the retail outlets is being delivered on time (either by sea or land) to the appropriate region.

Auto Maintenance

The auto maintenance department is responsible for maintaining and stocking the necessary parts for the road transport fleet. JBL has recently decided to outsource the maintenance of its road vehicles to a third party specialist that has multiple worldwide locations for vehicle maintenance.

Sales and Marketing

The sales and marketing department is responsible for obtaining orders from each store with regards to stock. They will also be responsible for managing the new internal online order system that will be hosted on the JBL intranet. They will need to develop a close relationship with logistics to ensure that the new online ordering system is compatible with the existing logistics operation.

Finance and Administration

The accounts department takes care of the MOC financial accounting, including the management of accounts payable and receivable. The accounts department also administers the payment of salary to staff members and any contractors.

The accounts department works very closely with the sales and marketing department. The online order system, managed by the sales department, will need an interface with the computer systems controlled by the accounts department.

Human Resources

The human resources department is responsible for the recruitment, selection and discharge of personnel and, also provides day-to-day personnel management support for human resources. JBL sees this function as being critical to their organization. The well-being of all JBL employees is a major priority.

ICT Department

Each MOC employs a small team of IT staff to help deliver and support IT services for its specific region. These groups run fairly autonomously and they manage their own support teams and processes; in the past this has been acceptable. There has never been a centrally coordinated policy unit for IT.

However, in London there is a central ICT department. Its responsibility is to manage JBL's applications, dedicated network infrastructure (between the UK and all regional MOCs) and the company intranet. The department is also responsible for the development and testing of the new online order system.

The current IT organizational structure of each MOC is as follows:

- Regional IT Manager: Overall manager for the specific region (reports to the CIO)
- Network Manager: Responsible for LAN infrastructure
- Project Manager: Responsible for testing and co-coordinating any modifications to the systems and solving small IT issues
- IT Support Manager: Responsible for managing and co-coordinating IT support engineers

Each region has a small team of mobile engineers that travels to its local retail outlets and solves the most commonly occurring issues independently. Each retail outlet contacts the mobile engineers directly if IT Incidents occur. If resolution is not possible then the engineers can call suppliers directly to solve the Incident. However, it is very costly to escalate Incidents in this manner.

JBL Information Systems

General

JBL's information systems use a range of IT "off the shelf" systems for finance, point of sale, stock ordering and CRM management. The computerization of JBL's information systems ranges in levels of maturity. Each regional MOC has its own customized IT system setup, due to the geographical distance between each region and the lack of standardization for the various IT systems. However, there are certain aspects that can be considered fairly mature. For example, a large part of the financial accounting for the entire JBL organization has been computerized.

The manual management of stock ordering throughout the regions has always been a significant issue for JBL. The urgent requirement for an online ordering system has been identified to allow all retail outlets to order stock through a centralized system that has incorporated workflow management. Resolution of this issue is so urgent that it is seen by the senior management of JBL as a key aspect for future success, and an enabler for one of the six key strategy areas: improving productivity.

General Systems

A general suite of applications is offered via the local network:

- Email
- Word processing
- Spreadsheet functionality
- Appointment calendars
- Scheduling software
- Human resources applications

The links between local networks and the links between desktop computers are completely transparent to the users.

The application software is stored centrally on the main servers within the ICT department in London; there is functionality to allow remote users to download them as needed. However, in each head office around the world, local versions are kept to allow for easier management of the local standard operating environments.

Hardware

Each of the Head Offices uses a series of servers for capturing and recording their information. Since each region has been managing their its IT requirements there is no standardized operating environment. The server platforms range from non-supported Windows NT servers to new Windows 2008 servers.

Network

The Wide Area Network (WAN) has been outsourced to a global provider, Sluit Wereld, Ltd. The outsourcer manages and coordinates the leasing of the network infrastructure and is responsible for providing monitoring information regarding its performance.

The cost to JBL of having Sluit Wereld maintain the WAN infrastructure has increased rapidly within the past two years. It is also becoming apparent that the infrastructure may not be as stable as outlined in the underpinning contract with Sluit Wereld.

Failures of the WAN often result in lost revenue and damaged corporate image. Point of Sale (POS) is also very dependent on the quality of the WAN.

Current Issues

- There appears to be a breakdown of communication between the ICT department and the business units. Due to a lack of understanding about systems and processes within the IT organization, the day-to-day operation of the business is affected. The business feels that there is a lack of internal cohesion within IT and this is causing the channels of communication to be confused and disorganized. There are some within senior management who feel ICT should be outsourced.
- Recently IT had considerable negative feedback from users regarding the standards of help and assistance provided by the technical teams within the MOCs. A recent report recommended that a Service Desk be set up to track, monitor and own user issues and requests; it was also recommended that they manage all user communication.
- Currently each MOC has its own Configuration Management Data Base (CMDB). However, there is no standard product or process to manage configurations throughout the organization. All audits are carried out internally by each MOC.
- The CIO would like to move towards a best practice approach with process-oriented systems. However, some teams are continuing to resist and work in isolation.
- The need to bring JBL retail stores into the internet age has also been identified as a management priority. The enhancement of the retail stores to include internet cafés will need a significant investment in IT resources and capabilities.

EXERCISES

Introduction Exercise

Instructor Led

Exercise:

Divide students into groups of 4-5

Timing:

15 minutes in groups

An appreciation of value

Consider, as consumers, what the key attributes of your favorite or preferred coffee shop are and rank these attributes in order of priority.

Service Strategy Exercise

Group Exercise

Exercise:

Divide students into groups of 4-5

Timing:

15 minutes

Creation of value

Define the following customer descriptions from JBL in terms of high or low utility and warranty

- The email service is good. My users inform me it's always available wherever they are in the world and it meets all the requirements in HR.
- The accounts software is useable when it's available. We always seem to have issues logging on first thing in the morning and this causes delays to our schedule. I don't think all of our requirements have been met, as we still have to do much of the work manually and then add it into the system.
- The POS connection is always available and we've never had any security issues with it. However, the device is difficult to understand and the staff often gets confused with the options on the screen.
- Customers often complain that during lunchtime, the connection to the shop's Internet is slow and they get constant disconnections. This is harming us, as most of our clients are business people due to our location next to the Financial District. We never get any complaints until around 11:00 a.m.

Service Design Exercise

Group Exercise

Exercise:

Divide students into groups of 4-5

Timing:

30 Minutes

The directors of JBL have been asked to consider a co-sourcing approach in their MOCs to support the expansion program.

1. Review the case study and list the possible benefits and issues to the organization.

The Service Catalog is a subset of the Service Portfolio. However, it is divided into two aspects: the Business Service Catalog and the Technical Service Catalog.

2. Select from the list below those attributes you would include in your Business Service Catalog for the proposed online ordering system.

| Attribute | Catalog (Business/Technical) |
|-------------------------|------------------------------|
| Business Owner | |
| Business Priority | |
| Service Cost | |
| IP Configurations | |
| Service Description | |
| Service Design Package | |
| Hours of Service | |
| Service Review Schedule | |
| Firewall Version | |

Service Transition

Group Exercise

Exercise:

Divide students into groups of 4-5

Timing:

45 minutes

Background

Part of the strategic vision was the introduction of Internet cafes into JBLs Service Catalog. This is a high profile transition for them and brand protection is essential; a great deal of money is being spent to advertise the new service, as JBL are keen to highlight their market differentiations.

The CIO has agreed to the following with all the regional IT managers:

- Each retail outlet IT will be managed by its regional MOC's ICT department
- Each retail outlet will have a local server with a direct link to the MOC
- Each retail outlet will have the following facilities:
 - Onsite network printer
 - Wireless access (through a captive portal architecture)
 - A local network for internal management systems and online ordering
 - An external network to access the Internet
- Each retail outlet migrating to Internet café status will have a minimum of 10 and maximum of 20 hardwired PCs (amount based on the size of the location) that will be administered from the MOC remotely
- Each regional MOC should be able to account for all its assets
- Each MOC will be accountable for Changes and Releases to the service
 1. List the possible issues you can imagine with initiating an organizational SACM process from the case study and additional information provided.
 2. Review the RFCs (Section A) and categorize them as a Standard, Normal, Emergency or Change proposal (list answers on the RFC, following page).
 3. There are three high profile releases planned. What approaches would you recommend for them and why?
 - a. Internet café
 - 300 cafes to be refurbished this year and operating as Internet cafés
 - b. Online Ordering System
 - All retail outlets supported by MOCs, all using the system within three months
 - c. Accounts Software Release v4.2
 - All accounting teams must on the same version for end-of-month reporting.

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



Service Transition

Section A – RFC

| | |
|------------|---------|
| RFC Number | DXB-065 |
|------------|---------|

| | | | |
|----------------|----------------|-------------------------|--------------|
| Requester | Mohammad Yaghi | Manager's Name | Justin Cones |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|---------------------------|----------------|------|
| Date Needed | ASAP | Estimated Cost | \$15 |
| Reason Required | Enable Customers to Print | | |

| Change Requested |
|----------------------------------------------------------------------------|
| The HP LaserJet color printer is out of cyan ink and needs to be replaced. |

| Resources Needed |
|----------------------------------------------------------------------------------------------|
| Desktop support engineer needed to renew the cyan ink cartridge and realign the print heads. |

| Estimated Impact Justification |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customers are upset and complaining that they cannot print on one of the printers. This is leading to overuse of the remaining printer, and long queues during peak hours. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-066 |
|------------|---------|

| | | | |
|----------------|------------|-------------------------|-------------|
| Requester | John Smith | Manager's Name | Alice White |
| Contact Number | 0781 23456 | Manager's Authorization | Yes |

| | | | |
|-----------------|-----------------------------|----------------|----------|
| Date Needed | ASAP | Estimated Cost | \$14,000 |
| Reason Required | New server and PCs required | | |

| Change Requested |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A new server and PC suite are required in the Rome central retail outlet. The outdated Windows 98 PCs and the NT4 server are not up-to-date with the requirements of the customers. Customers are now referring to this outlet as the "museum café," which is very embarrassing. |

| Resources Needed |
|-----------------------------------------------------------------------------|
| A site survey and all of the hardware, including installation and training. |

| Estimated Impact Justification |
|-------------------------------------------------------------------------------------|
| Customer satisfaction will be increased on-line with strategic Internet cafe' goal. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-067 |
|------------|---------|

| | | | |
|----------------|--------------|-------------------------|-------------|
| Requester | James La Rue | Manager's Name | Jack Turner |
| Contact Number | 123456789 | Manager's Authorization | Yes |

| | | | |
|-----------------|-----------------------------------|----------------|------|
| Date Needed | ASAP | Estimated Cost | \$35 |
| Reason Required | Help users navigate the monitors. | | |

| |
|------------------------------------------------------------|
| Change Requested |
| Need 30 rainbow-colored mouse pads for Paris central shop. |

| |
|------------------------------------|
| Resources Needed |
| Only the procurement of the items. |

| |
|-----------------------------------------------------------------------------------------------------------------------------|
| Estimated Impact Justification |
| I think that rainbow mouse pads will give our shop the upbeat look it needs and I like rainbows as they make me feel happy. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|--------------|
| RFC Number | DXB-070 | | |
| Requester | Mohammad Yaghi | Manager's Name | Tracey Green |
| Contact Number | 050123456 | Manager's Authorization | Yes |
| Date Needed | ASAP | Estimated Cost | \$800 |
| Reason Required | Causing accounting issues | | |
| Change Requested | | | |
| POS terminal replacement. | | | |
| Resources Needed | | | |
| Hardware, training and installation by a qualified engineer/administrator. | | | |
| Estimated Impact Justification | | | |
| <p>The POS terminal continually resets unexpectedly, and this sometimes occurs during transactions, which disrupts debit and credit card processing, resulting in lost or duplicate charges.</p> <p>We have also noticed that when we check payments at the end of the day, it is difficult to account for all the purchases made against the float or processed transactions, which means we do not have an accurate tally of the day's receipts.</p> | | | |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-073 |
|------------|---------|

| | | | |
|----------------|------------------|-------------------------|----------------|
| Requester | Archibald Renoir | Manager's Name | Mohammad Yaghi |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|-------------------------|----------------|---------|
| Date Needed | ASAP | Estimated Cost | Unknown |
| Reason Required | More bandwidth required | | |

| Change Requested |
|--------------------------------------------------------------------------------------------|
| More Internet bandwidth is required for the main café shops in Spain, France and Portugal. |

| Resources Needed |
|----------------------------------------------------------------|
| Procurement, testing, and instruction if new hardware is used. |

| Estimated Impact Justification |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>As a result of having low bandwidth during peak times, we are repeatedly fixing the same Incidents, which shift our technical resources away from other priorities.</p> <p>Our customers complain that they cannot access the Internet when they need to and our reputation will begin to suffer unless something gets done soon.</p> |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-078 |
|------------|---------|

| | | | |
|----------------|------------|-------------------------|---------------|
| Requester | Sammy Cien | Manager's Name | Soren Borsted |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|-----------------|----------------|---------|
| Date Needed | ASAP | Estimated Cost | No Cost |
| Reason Required | Password Change | | |

| Change Requested |
|---------------------------------------------------|
| Reset password for Sammy Cien – Account Database. |

| Resources Needed |
|--------------------------------------|
| Application Team (10 minutes' work). |

| Estimated Impact Justification |
|----------------------------------------------------------------------------------------------|
| Unable to access the up-to-date accounts data, causing delays in processing at end-of-month. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-111 |
|------------|---------|

| | | | |
|----------------|---------------|-------------------------|-------------|
| Requester | Chris McGuire | Manager's Name | Craig Hazel |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|--------------------|----------------|-------------|
| Date Needed | ASAP | Estimated Cost | \$3,000,000 |
| Reason Required | Building Expansion | | |

| Change Requested |
|--------------------------------------------------------------------------------|
| See business case 3434342a (Board approved). New premises for European MOC. |

| Resources Needed |
|-----------------------------|
| See business case 3434342a. |

| Estimated Impact Justification |
|-----------------------------------------------------------------------------------------------------------------------------------------|
| Capacity to meet European expansion and IT growth forecasts. Must be complete within 18 months; this has business priority status 1. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-023 |
|------------|---------|

| | | | |
|----------------|----------------|-------------------------|-----------------|
| Requester | Jorgen Friguld | Manager's Name | Ashmed Mohammed |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|----------|----------------|---------|
| Date Needed | ASAP | Estimated Cost | No Cost |
| Reason Required | New Hire | | |

| Change Requested |
|------------------------------------------------------------------------------------------------|
| Jack Black, a new employee in the accounts department, needs a user account with email access. |

| Resources Needed |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The User account should be a member of the groups below:</p> <ul style="list-style-type: none">• Print• Accounts• Online ordering group <p>Since Jack has not passed his probation, he should not be given access to the personnel drive.</p> |

| Estimated Impact Justification |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Jack is currently in the accounts department as a principal auditor and needs a user account and email address to access resources enabling him to fulfill his duties. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-112 |
|------------|---------|

| | | | |
|----------------|--------------------|-------------------------|--------------|
| Requester | Chuck Seagull, Jr. | Manager's Name | Gale Hatcher |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|----------|----------------|---------|
| Date Needed | ASAP | Estimated Cost | \$2,000 |
| Reason Required | New Hire | | |

| Change Requested |
|------------------------------------------------------|
| Tarquin Farquhar, a new hire, requires IT equipment. |

| Resources Needed |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mr. Farquhar requires a laptop with the following specs: 12.1 screens, 3GB RAM, 500GB HD, 3.8GHz Duo processor. His software requirements are: Vista Ultimate, W2007 Office, Adobe Acrobat Professional, Front Page, Viso, Cisco VPN Software, Ulead Expert video editing software. This cost is pre-authorized. |

| Estimated Impact Justification |
|-------------------------------------------------------------------------------------------------------------------------------------|
| Mr. Farquhar has been appointed as the principal marketing consultant and he requires the equipment in order to fulfill his duties. |

Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



| | |
|------------|---------|
| RFC Number | DXB-113 |
|------------|---------|

| | | | |
|----------------|-------------|-------------------------|-----------------|
| Requester | Livi Denden | Manager's Name | Carlos Mackerel |
| Contact Number | 050123456 | Manager's Authorization | Yes |

| | | | |
|-----------------|------------------|----------------|---------|
| Date Needed | ASAP | Estimated Cost | No Cost |
| Reason Required | Restore of files | | |

| |
|--------------------------------------------|
| Change Requested |
| Restore of Dame Edna's files to \$z23a DB. |

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resources Needed |
| Backup tapes, Backup Administrator Files: <ul style="list-style-type: none">• Excel Spreadsheet Address.xls• Last saved at the start of the month |

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Estimated Impact Justification |
| Critical, unable to run accounting sheets until this done. There is a 3:00 p.m. cut-off point today for the authorization and submission of files to the bank. The CIO wants this resolved ASAP. |

Operations Exercise

Group Exercise

Exercise:

Divide students into groups of 4-5

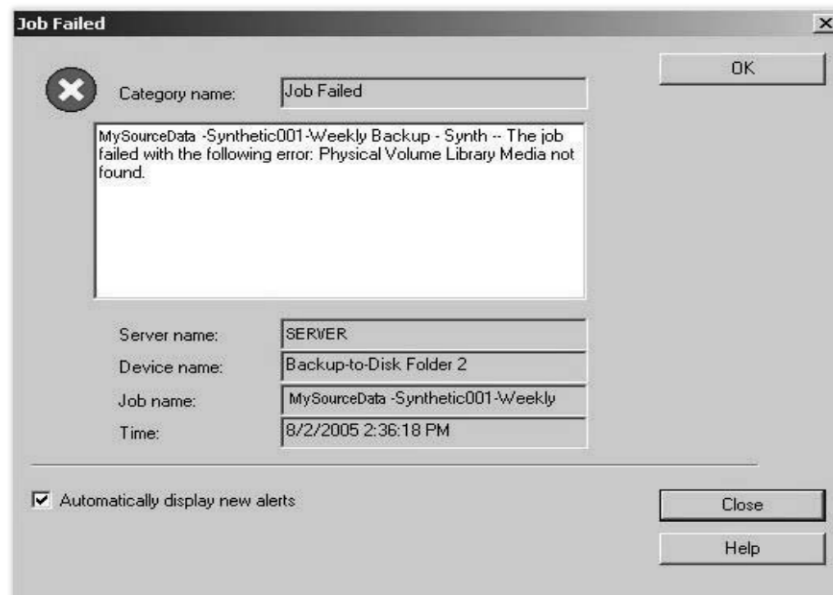
Timing:

45 minutes

Background:

Since the release of its Internet café service, JBL is operating with associated major Incidents on a weekly basis. The CIO has come under heavy pressure from the board of directors for the poor results and lack of communication from the regional MOCs, and must find a resolution.

1. You are the CIO, and to help with poor communication and lack of ownership demonstrated by the MOC support teams, you want to introduce a Service Desk function. Considering the issues currently affecting the organization and in particular ICT, what type of structure would you recommend and why?
2. The regional IT manager has asked you to summarize the benefits of having Problem Management implemented to Incident Management. List the benefits.
3. Examine the events below and assign them the appropriate event category: (Information, Warning, or Exception)
 - a. *****CPU6 Running at 100%***** Threshold set at 90%
 - b. Automated email from the MOC Domain Controller stating the below

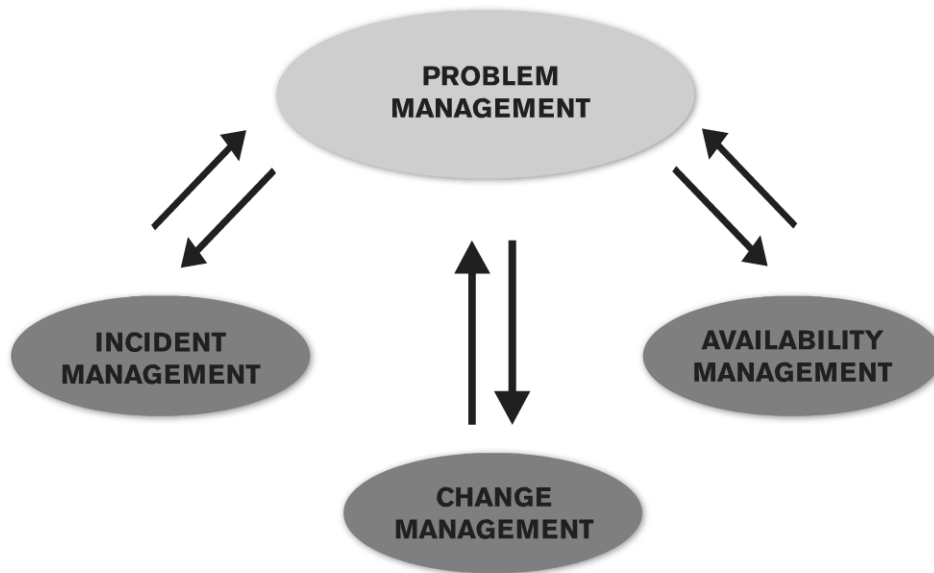


Exercises

ITIL® Foundation with Case Study (IV3-213 5.33)



- c. Sam Squires logged onto terminal 12 (Password authenticated)
 - d. ****Memory utilization of server XX23 is currently at 65%**** Threshold set at 75%
 - e. ****Backup 776a complete please check output logs****
 - f. ****Batch job Accounts12 completed**** No errors
4. The problem manager is newly appointed and needs your ITIL experience to help him chart how Problem Management relates to the other processes. Please provide one input and output between Problem Management and its associated processes below:



Continual Service Improvement Exercise

Group Exercise

EXERCISE:

DIVIDE STUDENTS INTO GROUPS OF 4-5

TIMING:

20 MINUTES

As the newly appointed CSI manager, you have been asked by the CIO to coordinate a structured approach for improvements to IT services and processes throughout JBL. Highlight the steps that you would undertake to achieve this. For each of the steps, explain briefly what is involved and the benefits of each step.

Continual Service Improvement Exercise

Group Exercise

EXERCISE:

DIVIDE STUDENTS INTO GROUPS OF 4-5

TIMING:

20 MINUTES

The CIO is reviewing ways to improve the perception of IT towards Continual Service Improvement (CSI) by demonstrating to the business that IT wants to better integrate with the business. The CIO believes that honesty is the best policy and so has decided to "tell it like it is."

You are the CIO for the organization. The executives are agreeable to your proposal of implementing a CSI approach to services and processes.

Which of the following set of Critical Success Factors will properly demonstrate that the organization's management commitment to Continual Service Improvement (CSI) is genuine?

A)

- Appointment of a CSI manager
- Adoption of the Service Lifecycle approach throughout the IT department
- Visible management participation in CSI launch

B)

- Appointment of a CSI manager
- Approval of the CSI initiatives as projects
- Appropriate resource allocation for CSI projects throughout the Service Lifecycle

C)

- Adapting Service Management processes to suit the IT vision
- Embedding CSI into everyone's job description
- Appropriate technology to support the CSI activities

D)

- Ongoing, visible management participation
- Sufficient ongoing funding for CSI activities
- Adoption of the Service Lifecycle approach throughout IT

Sample Exams



The ITIL® Foundation Examination

Sample Paper A, version 5.0

Multiple Choice

Instructions

1. *All 40 questions should be attempted.*
2. *All answers are to be marked on the answer grid provided.*
3. *You have 60 minutes to complete this paper.*
4. *You must achieve 26 or more out of a possible 40 marks (65%) to pass this examination.*

1. What types of changes are NOT usually included within the scope of change management?
 - a) Changes to a mainframe computer
 - b) Changes to business strategy
 - c) Changes to a service level agreement (SLA)
 - d) The retirement of a service

2. Which of the following is NOT a purpose of service operation?
 - a) To undertake testing to ensure services are designed to meet business needs
 - b) To deliver and manage IT services
 - c) To manage the technology used to deliver services
 - d) To monitor the performance of technology and processes

3. What does the term IT operations control refer to?
 - a) Managing the technical and applications management functions
 - b) Overseeing the execution and monitoring of operational activities and events
 - c) A set of tools used to monitor and display the status of the IT infrastructure and applications
 - d) A service desk monitoring the status of the infrastructure when operators are not available

4. Which process is responsible for recording relationships between service components?
 - a) Service level management
 - b) Service portfolio management
 - c) Service asset and configuration management (SACM)
 - d) Incident management

5. What is the RACI model used for?
 - a) Documenting the roles and responsibilities of stakeholders in a process or activity
 - b) Defining requirements for a new service or process
 - c) Analysing the business impact of an incident
 - d) Creating a balanced scorecard showing the overall status of service management

6. Which of the following is the BEST description of an operational level agreement (OLA)?
- a) An agreement between an IT service provider and another part of the same organization that assists in the provision of services
 - b) A written agreement between the IT service provider and their customer(s) defining key targets and responsibilities of both parties
 - c) An agreement between two service providers about the levels of service required by the customer
 - d) An agreement between a third party service desk and the IT customer about fix and response times
7. What is the MAIN purpose of availability management?
- a) To monitor and report availability of components
 - b) To ensure that all targets in the service level agreements (SLAs) are met
 - c) To guarantee availability levels for services and components
 - d) To ensure that service availability meets the agreed needs of the business
8. Which of the following does service transition provide guidance on?
- 1. Introducing new services
 - 2. Decommissioning services
 - 3. Transfer of services between service providers
- a) 1 and 2 only
 - b) 2 only
 - c) All of the above
 - d) 1 and 3 only
9. Which one of the following is NOT a stage of the service lifecycle?
- a) Service optimization
 - b) Service transition
 - c) Service design
 - d) Service strategy

10. Which one of the following statements about a configuration management system (CMS) is CORRECT?
- a) The CMS should not contain corporate data about customers and users
 - b) There may be more than one CMS
 - c) There should not be more than one configuration management database (CMDB)
 - d) If an organization outsources its IT services there is still a need for a CMS
11. What are the three sub-processes of capacity management?
- a) Business capacity management, service capacity management and component capacity management
 - b) Supplier capacity management, service capacity management and component capacity management
 - c) Supplier capacity management, service capacity management and technology capacity management
 - d) Business capacity management, technology capacity management and component capacity management
12. Which of the following would be stored in the definitive media library (DML)?
- 1. Copies of purchased software
 - 2. Copies of internally developed software
 - 3. Relevant licence documentation
 - 4. The change schedule
- a) All of the above
 - b) 1 and 2 only
 - c) 3 and 4 only
 - d) 1, 2 and 3 only
13. Which process is responsible for reviewing operational level agreements (OLAs) on a regular basis?
- a) Supplier management
 - b) Service level management
 - c) Service portfolio management
 - d) Demand management

14. Which role should ensure that process documentation is current and available?
- a) The service owner
 - b) The chief information officer
 - c) Knowledge management
 - d) The process owner
15. Which of the following does the release and deployment management process address?
- 1. Defining and agreeing release and deployment plans
 - 2. Ensuring release packages can be tracked
 - 3. Authorizing changes to support the process
- a) 1 and 2 only
 - b) All of the above
 - c) 2 and 3 only
 - d) 1 and 3 only
16. Which of the following are characteristics of every process?
- 1. It is measurable
 - 2. It delivers a specific result
 - 3. It delivers its primary results to a customer or stakeholder
- a) 1 and 3 only
 - b) 1 and 2 only
 - c) 2 and 3 only
 - d) All of the above
17. Which of the following are key ITIL characteristics that contribute to its success?
- 1. It is vendor-neutral
 - 2. It is non-prescriptive
 - 3. It is best practice
 - 4. It is a standard
- a) 3 only
 - b) 1, 2 and 3 only
 - c) All of the above
 - d) 2, 3 and 4 only

18. Who should be granted access to the information security policy?
- a) Senior business managers and IT staff
 - b) Senior business managers, IT executives and the information security manager
 - c) All customers, users and IT staff
 - d) Information security management staff only
19. Which of the following are valid elements of a service design package (SDP)?
- 1. Agreed and documented business requirements
 - 2. A plan for transition of the service
 - 3. Requirements for new or changed processes
 - 4. Metrics to measure the service
- a) 1 only
 - b) 2 and 3 only
 - c) 1, 2 and 4 only
 - d) All of the above
20. Which of the following are examples of tools that might support the service transition stage of the service lifecycle?
- 1. A tool to store definitive versions of software
 - 2. A workflow tool for managing changes
 - 3. An automated software distribution tool
 - 4. Testing and validation tools
- a) 1, 3 and 4 only
 - b) 1, 2 and 3 only
 - c) All of the above
 - d) 2, 3 and 4 only
21. Which of the following statements about problem management is/are CORRECT?
- 1. It ensures that all resolutions or workarounds that require a change to a configuration item (CI) are submitted through change management
 - 2. It provides management information about the cost of resolving and preventing problems
- a) 1 only
 - b) 2 only
 - c) Both of the above
 - d) Neither of the above

22. What is the purpose of the request fulfilment process?
- a) Dealing with service requests from the users
 - b) Making sure all requests within an IT organization are fulfilled
 - c) Ensuring fulfilment of change requests
 - d) Making sure the service level agreement (SLA) is met
23. Which statement about value creation through services is CORRECT?
- a) The customer's perception of the service is an important factor in value creation
 - b) The value of a service can only ever be measured in financial terms
 - c) Delivering service provider outcomes is important in the value of a service
 - d) Service provider preferences drive the value perception of a service
24. Which one of the following statements about internal and external customers is MOST correct?
- a) External customers should receive better customer service because they pay for their IT services
 - b) Internal customers should receive better customer service because they pay employee salaries
 - c) The best customer service should be given to the customer that pays the most money
 - d) Internal and external customers should receive the level of customer service that has been agreed
25. Which one of the following should IT services deliver to customers?
- a) Capabilities
 - b) Cost
 - c) Risk
 - d) Value
26. Which one of the following activities is part of the service level management (SLM) process?
- a) Designing the configuration management system from a business perspective
 - b) Creating technology metrics to align with customer needs
 - c) Monitoring service performance against service level agreements (SLAs)
 - d) Training service desk staff how to deal with customer complaints about service

27. Which one of the following BEST summarizes the purpose of event management?
- a) The ability to detect events, make sense of them and determine the appropriate control action
 - b) The ability to detect events, restore normal service as soon as possible and minimize the adverse impact on business operations
 - c) The ability to monitor and control the activities of technical staff
 - d) The ability to report on the successful delivery of services by checking the uptime of infrastructure devices
28. Which one of the following should a service catalogue contain?
- a) The version information of all software
 - b) The organizational structure of the company
 - c) Asset information
 - d) Details of all operational services
29. What does "Warranty of a service" mean?
- a) The service is fit for purpose
 - b) There will be no failures in applications and infrastructure associated with the service
 - c) All service-related problems are fixed free of charge for a certain period of time
 - d) Customers are assured of certain levels of availability, capacity, continuity and security
30. Which is the first activity of the continual service improvement (CSI) approach?
- a) Understand the business vision and objectives
 - b) Carry out a baseline assessment to understand the current situation
 - c) Agree on priorities for improvement
 - d) Create and verify a plan
31. Which one of the following is a benefit of using an incident model?
- a) It will make problems easier to identify and diagnose
 - b) It means known incident types never recur
 - c) It provides pre-defined steps for handling particular types of incidents
 - d) It ensures all incidents are easy to solve

32. Which one of the following is the CORRECT sequence of activities for handling an incident?
- a) identification, logging, categorization, prioritization, initial diagnosis, escalation, investigation and diagnosis, resolution and recovery, closure
 - b) prioritization, identification, logging, categorization, initial diagnosis, escalation, investigation and diagnosis, resolution and recovery, closure
 - c) identification, logging, initial diagnosis, categorization, prioritization, escalation, resolution and recovery, investigation and diagnosis, closure
 - d) identification, initial diagnosis, investigation, logging, categorization, escalation, prioritization, resolution and recovery, closure
33. Which service lifecycle stage ensures that measurement methods will provide the required metrics for new or changed services?
- a) Service design
 - b) Service operation
 - c) Service strategy
 - d) Service delivery
34. Which of the following processes are concerned with managing risks to services?
- 1. IT service continuity management
 - 2. Information security management
 - 3. Service catalogue management
- a) All of the above
 - b) 1 and 3 only
 - c) 2 and 3 only
 - d) 1 and 2 only
35. Which one of the following is NOT a type of metric described in continual service improvement (CSI)?
- a) Process metrics
 - b) Service metrics
 - c) Personnel metrics
 - d) Technology metrics

36. Which statement about the relationship between the configuration management system (CMS) and the service knowledge management system (SKMS) is CORRECT?
- a) The SKMS is part of the CMS
 - b) The CMS is part of the SKMS
 - c) The CMS and SKMS are the same thing
 - d) There is no relationship between the CMS and the SKMS
37. What is the role of the emergency change advisory board (ECAB)?
- a) To assist the change manager in ensuring that no urgent changes are made during particularly volatile business periods
 - b) To assist the change manager by implementing emergency changes
 - c) To assist the change manager in evaluating emergency changes and to decide whether they should be authorized
 - d) To assist the change manager in speeding up the emergency change process so that no unacceptable delays occur
38. Which of the following statements about the service desk is/are CORRECT?
- 1. The service desk is a function that provides a means of communication between IT and its users for all operational issues
 - 2. The service desk should be the owner of the problem management process
- a) 2 only
 - b) 1 only
 - c) Both of the above
 - d) Neither of the above
39. Which one of the following is the CORRECT list of the four Ps of service design?
- a) Planning, products, position, processes
 - b) Planning, perspective, position, people
 - c) Perspective, partners, problems, people
 - d) People, partners, products, processes

40. Which one of the following represents the BEST course of action to take when a problem workaround is found?
- a) The problem record is closed
 - b) The problem record remains open and details of the workaround are documented within it
 - c) The problem record remains open and details of the workaround are documented on all related incident records
 - d) The problem record is closed and details of the workaround are documented in a request for change(RFC)



The ITIL[®] Foundation Examination

Sample Paper A, version 5.0

Multiple Choice

ANSWERS AND RATIONALE

Answer Key and Rationale:

| Q | A | Syllabus Ref | Book Ref | Rationale |
|----|---|--------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | B | 05-51 | ST 4.2.4.3 | A change request is a formal communication seeking an alteration to one or more configuration items (CIs). Services, SLAs and computers are examples of CIs. A business strategy is not normally a CI and would be out of scope for change management. |
| 2 | A | 02-09 | SO 1.1.1 | Each of these are a purpose of service operation except for option A, undertaking testing to ensure services are designed to meet business needs. Option A is part of service transition. |
| 3 | B | 06-02 | SO 6.5.1.1 | IT operations control oversees the execution and monitoring of the operational activities and events in the IT infrastructure. |
| 4 | C | 05-63 | ST 4.3.1 | Part of SACM's purpose is to maintain accurate information about assets, including the relationship between assets. |
| 5 | A | 07-02 | SD 3.7.4.1 | RACI is a responsibility model used by ITIL to help define roles and responsibilities. |
| 6 | A | 03-12 | SD 4.3.4 | A is the OLA, B is the definition of an SLA, C doesn't correspond to an ITIL definition, D involves a third party and is a contract. |
| 7 | D | 05-42 | SD 4.4.1 | A is a supporting element of availability management, not a main purpose. B relates to service level management. Availability management does not offer guarantees as identified in C. D is the main purpose of availability management: - "to ensure that the level of availability delivered in all IT services meets the agreed availability needs... of the business." |
| 8 | C | 02-07 | ST 1.1.1 | All three are in scope for service transition as all three involve major change. |
| 9 | A | 02-02 | SS 1.2 | Service optimization is the correct answer |
| 10 | D | 03-18 | ST 4.3.4.3 | A: a CMS can contain corporate data about users / customers such as location or department. B and C: there may be more than one CMDB but they will be part of a single CMS. D is correct as a CMS still helps to control and report on the infrastructure when IT services are outsourced. |
| 11 | A | 05-45 | SD 4.5.4.3 | Book answer...business, service and component capacity management are the three sub-processes |
| 12 | D | 03-19 | ST 4.3.4.4 | The DML contains master copies of all controlled software in an organization ... "along with licence documents or information". The change schedule would not be included. |
| 13 | B | 05-31 | SD 4.3.1 | Service level management has responsibility for negotiating and agreeing OLAs. |
| 14 | D | 07-01 | SD 6.3.2 | Book answer. A process owner should ensure process documentation is current and available. |
| 15 | A | 05-61 | ST 4.4.1 | The two correct answers (1 and 2) are included in release and deployment objectives. Option 3 is addressed by change management. |
| 16 | D | 01-10 | SS 2.2.2 | Measurability, delivery of specific results, and delivery of results to a customer or stakeholder are all characteristics of a process. |
| 17 | B | 01-02 | SD 1.4 | Option 4 is incorrect, ITIL is not a standard: ISO/IEC 20000 would be an example of a standard. ITIL is vendor-neutral, non-prescriptive, and provides a best practice framework. |
| 18 | C | 05-43 | SD 4.7.4.1 | In most cases the policies should be widely available to all customers and users and referenced in SLAs, OLAs and UCs. |
| 19 | D | 03-14 | SD App A | All of the elements identified are included in the service design package passed to service transition. |
| 20 | C | 08-02 | SS 7.1 | 1 would be used to support a DML. 2 helps change management. 3 is a release and deployment tool. 4 can help with testing and validation. They all support service transition. |

| Q | A | Syllabus Ref | Book Ref | Rationale |
|----|---|----------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21 | C | 05-72 | SO 4.4.2 and 4.4.6.4 | Book answer. They are both valid roles for problem management. |
| 22 | A | 05-82 | SO 4.3.1 | Request fulfilment is the process responsible for dealing with service requests from the users. 'All requests' (B) is too wide a scope for the process. Change management looks after change requests (C). Service level management is responsible for D. |
| 23 | A | 04-02 | SS 3.2.3 | D is incorrect; customer preferences drive value perception. C is incorrect; delivering on customer outcomes is vital. B is incorrect; the value of a service can be financial but other factors are also relevant. A is correct; customer perception is a vital element in defining how much a customer values a service. |
| 24 | D | 01-04 | SS 3.2.1.2 | D is the correct response. Both internal and external customers should be provided with the agreed level of service, and with the same level of customer service. |
| 25 | D | 01-03 | SS 2.1.1 | A service is a means of delivering value to customers. IT needs capabilities to deliver services. Cost and risk are what IT helps to manage. |
| 26 | C | 05-31 | SD 4.3.5.6 | C is correct: monitoring the SLAs and performance against them is a vital part of the service level management process. A - designing the CMS is a service asset and configuration management activity. B - technology metrics are likely to be created within capacity management or other design processes. D - training the service desk is a service desk role. |
| 27 | A | 05-81 | SO 4.1.1 | A - the ability to detect events, make sense of them and determine the appropriate control action is provided by event management. B includes some incident management responsibilities. C is a technical management task. D is likely to be shared between availability management and service level management. |
| 28 | D | 05-41 | SD 4.2.1 | The service catalogue should contain details of all operational services. |
| 29 | D | 03-01 | SS 2.1.6 | A is part of the definition of utility. B is unrealistic. C could be feasible as a warranty statement from another industry but is not the definition of warranty as used by ITIL. D is a good summary of warranty as defined by ITIL. |
| 30 | A | 04-09 | CSI 3.1 | The improvement approach begins with embracing the vision by understanding the high-level business objectives. |
| 31 | C | 05-71 | SO 4.2.4.2 | Incident models are designed to provide reusable steps that can be used to restore service after known incident types. |
| 32 | A | 05-71 | SO 4.2.5 | The correct order is given in the diagram in the incident management process, and in the subsections of 4.2.5. |
| 33 | A | 04-04 | SD 3.1.1 | Measurements and metrics should be included in the design for a new or changed service. |
| 34 | D | 05-43 05-46 | SD 4.7.2 SD 4.6.5.2 | IT service continuity management carries out risk assessment as part of defining the requirements and strategy. Information security also needs to analyse security risks before taking action to mitigate them. Service catalogue management does not carry out these assessments. |
| 35 | C | 04-10 | CSI 5.5 | Personnel metrics are not one of the three types of metrics described in CSI |
| 36 | B | 03-16 | ST 4.7.4.3 | A is the wrong way round. C is incorrect as the SKMS contains more information than the CMS. D is incorrect as the CMS is part of the SKMS. |
| 37 | C | 05-51 | ST 4.2.5.11 | The emergency change advisory board (ECAB) provides assistance in the authorization of emergency changes. |

| Q | A | Syllabus Ref | Book Ref | Rationale |
|----|---|--------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 38 | B | 06-01 | SO 6.3 | The service desk should be the single point of contact for IT users on a day-by-day basis. The service desk manager may also be the incident management process owner but would not normally be the owner of problem management. |
| 39 | D | 04-03 | SD 3.1.5 | Book answer: people, processes, products (services, technology and tools) and partners (suppliers, manufacturers and vendors). |
| 40 | B | 05-72 | SO 4.4.5.6 | A is incorrect; the problem record must remain open as it hasn't yet been resolved. B is correct to document the workaround on the problem record, not on each Incident record [C], nor on an RFC [D]. |



The ITIL® Foundation Examination

Sample Paper B, version 5.0

Multiple Choice

Instructions

1. All 40 questions should be attempted.
2. All answers are to be marked on the answer grid provided.
3. You have 60 minutes to complete this paper.
4. You must achieve 26 or more out of a possible 40 marks (65%) to pass this examination.

- 1 Input from which processes could be considered by service level management when negotiating service level agreements (SLA)?
 - a) All other ITIL processes
 - b) Capacity management and availability management only
 - c) Incident management and problem management only
 - d) Change management and release and deployment management only

- 2 Which one of the following statements about a standard change is INCORRECT?
 - a) They are pre-authorized by change management
 - b) They follow a procedure or work instruction
 - c) They are low risk
 - d) They must be implemented as soon as possible

- 3 Which of the following statements about the service desk are CORRECT?
 1. It provides a single point of contact between the service provider and users
 2. It manages incidents and service requests
 3. It is a service management process
 4. Service desk staff try to restore service as quickly as possible
 - a) All of the above
 - b) 1, 2, and 4 only
 - c) 2 and 4 only
 - d) 2 and 3 only

- 4 Which of the following statements about functions are CORRECT?
 1. They may include tools
 2. They are groups that use resources to carry out one or more activities
 3. One person or group may perform multiple functions
 4. They are more costly to implement compared to processes
 - a) 1, 2 and 3 only
 - b) 1, 2 and 4 only
 - c) All of the above
 - d) None of the above

- 5 Which one of the following is the BEST description of the activities carried out by facilities management?
- a) The management of IT services that are viewed as "utilities", such as printers or network access
 - b) Advice and guidance to IT operations on methodology and tools for managing IT services
 - c) Management of the physical IT environment such as a data centre or computer room
 - d) The procurement and maintenance of tools that are used by IT operations staff to maintain the infrastructure
- 6 Which process would assist with the identification and resolution of any incidents and problems associated with service or component performance?
- a) Capacity management
 - b) Supplier management
 - c) Technology management
 - d) Change management
- 7 Which one of the following statements about the known error database (KEDB) is MOST correct?
- a) The KEDB is the same database as the service knowledge management system (SKMS)
 - b) The KEDB should be used during the incident diagnosis phase to try to speed up the resolution process
 - c) Care should be taken to avoid duplication of records in the KEDB. This can be done by giving access to as many technicians as possible to create new records
 - d) Access to the KEDB should be limited to the service desk
- 8 Which of the following statements about key performance indicators (KPIs) and metrics are CORRECT?
- 1. Service metrics measure the end-to-end service
 - 2. Each KPI should relate to a critical success factor
 - 3. Metrics can be used to identify improvement opportunities
 - 4. KPIs can be both qualitative and quantitative
- a) 1 only
 - b) 2 and 3 only
 - c) 1, 2 and 4 only
 - d) All of the above

- 9 Which one of the following maintains relationships between all service components?
- a) The capacity plan
 - b) The definitive media library
 - c) The configuration management system
 - d) A service level agreement
- 10 Should a customer's request for a new service ALWAYS be fulfilled?
- a) Yes – if they are an external customer as they are paying for the service
 - b) No – if they are an internal customer as they are not always paying for the service
 - c) No – it is the responsibility of the service provider to carry out due diligence before requests are fulfilled
 - d) Yes – the service provider should ensure that all requests for new services are fulfilled
- 11 Which of the following statements is/are CORRECT?
- 1. Problem management can support the service desk by providing known errors to speed up incident resolution
 - 2. Problem management is the only source of information to service level management about the impact of changes
- a) 1 only
 - b) 2 only
 - c) Both of the above
 - d) Neither of the above
- 12 A failure has occurred on a system and is detected by a monitoring tool. This system supports a live IT service. When should an incident be raised?
- a) Only when users notice the failure
 - b) An incident should not be raised if the technicians have seen this before and have a workaround
 - c) Only if the failure results in a service level being breached
 - d) Immediately, to limit or prevent impact on users

- 13 Which of the following could be considered stakeholders in a service management project?
1. Users
 2. Customers
 3. Suppliers
 4. Functions
- a) 1 and 2 only
- b) 3 and 4 only
- c) 2 and 4 only
- d) All of the above
- 14 Which of the following activities does service asset and configuration management ensure are performed?
1. Configuration items (CIs) are identified
 2. CIs are baselined
 3. Changes to CIs are controlled
- a) All of the above
- b) 1 and 2 only
- c) 1 and 3 only
- d) 2 and 3 only
- 15 Which of the following aspects of service design should be considered when designing a service solution?
1. Measurement methods and metrics
 2. Management information systems and tools
 3. Technology architectures
 4. The processes required
- a) 1 and 2 only
- b) 2 and 3 only
- c) 2, 3 and 4 only
- d) All of the above
- 16 Which one of the following statements is CORRECT for ALL processes?
- a) They define functions as part of their design
- b) They deliver results to a customer or stakeholder
- c) They are carried out by an external service provider in support of a customer
- d) They are units of organizations responsible for specific outcomes

- 17 Which process is primarily responsible for packaging, building, testing and deploying services?
- a) Transition planning and support
 - b) Release and deployment management
 - c) Service asset and configuration management
 - d) Service catalogue management
- 18 Which one of the following is the BEST example of a workaround?
- a) A technician installs a script to temporarily divert prints to an alternative printer until a permanent fix is applied
 - b) A technician tries several ways to solve an incident. One of them works, although they do not know which one
 - c) After reporting the incident to the service desk, the user works on alternative tasks while the problem is identified and resolved
 - d) A device works intermittently, allowing the user to continue working at degraded levels of performance while the technician diagnoses the incident
- 19 Which of the following areas can be helped by technology?
- 1. Request management
 - 2. Service catalogue management
 - 3. Detection and monitoring
 - 4. Design and modelling
- a) 1, 2 and 3 only
 - b) 1, 3 and 4 only
 - c) 2, 3 and 4 only
 - d) All of the above
- 20 Which one of the following is the CORRECT list of stages in the Deming Cycle?
- a) Plan, Measure, Monitor, Report
 - b) Plan, Check, Re-Act, Implement
 - c) Plan, Do, Act, Audit
 - d) Plan, Do, Check, Act

- 21 Which two processes will be involved the MOST in negotiating and agreeing contracts for the provision of recovery capability to support continuity plans?
- a) Service level management and capacity management
 - b) Supplier management and service level management
 - c) IT service continuity management and service level management
 - d) IT service continuity management and supplier management
- 22 Which one of the following is the BEST definition of an incident model?
- a) The template that defines the incident logging form used for reporting incidents
 - b) A type of incident involving a standard (or model) type of configuration item (CI)
 - c) A set of pre-defined steps to be followed when dealing with a known type of incident
 - d) An incident that is easy to solve
- 23 What roles are defined in the RACI model?
- a) Responsible, Accountable, Consulted, Informed
 - b) Responsible, Achievable, Consulted, Informed
 - c) Realistic, Accountable, Consulted, Informed
 - d) Responsible, Accountable, Corrected, Informed
- 24 Which stage of the service lifecycle decides what services should be offered and to whom they will be offered?
- a) Continual service improvement
 - b) Service operation
 - c) Service design
 - d) Service strategy

- 25 Which of the following does continual service improvement (CSI) provide guidance on?
1. How to improve process efficiency and effectiveness
 2. How to improve services
 3. Improvement of all stages of the service lifecycle
- a) 1 and 2 only
 - b) 1 and 3 only
 - c) 2 and 3 only
 - d) All of the above
- 26 Which of the following is a type of service level agreement (SLA) described in the ITIL service design publication?
- a) Priority-based SLA
 - b) Technology-based SLA
 - c) Location-based SLA
 - d) Customer-based SLA
- 27 Which one of the following is the BEST definition of an event?
- a) An occurrence where a performance threshold has been exceeded and an agreed service level has been impacted
 - b) A change of state that has significance for the management of an IT service
 - c) A known system defect that generates multiple incident reports
 - d) A planned meeting of customers and IT staff to announce a new service or improvement programme
- 28 Which one of the following is the MOST appropriate stakeholder to define the value of a service?
- a) Customers
 - b) IT Senior management
 - c) Financial management for IT services
 - d) Suppliers

- 29 Which of the following should be treated as an incident?
1. A user is unable to access a service during service hours
 2. An authorized IT staff member is unable to access a service during service hours
 3. A network component fails but the user is not aware of any disruption to service
 4. A user contacts the service desk about the slow performance of an application
- a) All of the above
- b) 1 and 4 only
- c) 2 and 3 only
- d) None of the above
- 30 Which one of the following statements about a change model is CORRECT?
- a) A change model should NOT be used for emergency changes
- b) A change model should be constructed when a significant change is required
- c) A change model defines the steps that should be taken to handle a particular type of change
- d) Escalation procedures are outside the scope of a change model
- 31 The CSI approach uses a number of techniques. Which one of the following techniques would BEST help a business understand "where are we now?"?
- a) Reviewing critical success factors
- b) Understanding the business vision
- c) Performing a baseline assessment
- d) Checking the CSI register
- 32 Which service operation processes are missing from the following list?
1. Incident management
 2. Problem management
 3. Access management
 4. ?
 5. ?
- a) Event management and request fulfilment
- b) Event management and service desk
- c) Facilities management and event management
- d) Change management and service level management

- 33 Which stage of the service lifecycle provides a framework for evaluating service capabilities and risk profiles before new or changed services are deployed?
- a) Service strategy
 - b) Continual service improvement
 - c) Service transition
 - d) Service operation
- 34 Which of the following activities should a service owner undertake?
- 1. Representing a specific service across the organization
 - 2. Updating the configuration management system (CMS) after a change
 - 3. Helping to identify service improvements
 - 4. Representing a specific service in change advisory board (CAB) meetings
- a) 2, 3 and 4 only
 - b) All of the above
 - c) 1, 2 and 3 only
 - d) 1, 3 and 4 only
- 35 Which one of the following is NOT a purpose or objective of availability management?
- a) To monitor and report on the availability of components
 - b) To ensure that service availability matches the agreed needs of the business
 - c) To assess the impact of changes on the availability plan
 - d) To ensure that business continuity plans are aligned to business objectives
- 36 Which one of the following is a CORRECT description of the “four Ps” of service design?
- a) A four-step process for the design of effective service management
 - b) A definition of the people and products required for successful design
 - c) A set of questions that should be asked when reviewing design specifications
 - d) Four major areas that need to be considered during service design

- 37 Which one of the following BEST describes a major problem review?
- a) Facilitated by the problem manager, a major problem review is designed to apportion blame after a resolution to the problem has been found
 - b) A major problem review is run as part of the change advisory board (CAB) by the change manager. It is conducted after the request for change (RFC) to resolve the problem has been accepted
 - c) A major problem review is facilitated by the service desk manager so that lessons can be learned after a major problem has been resolved
 - d) Facilitated by the problem manager, the review is conducted so that lessons can be learned from the major problem, and to provide training and awareness for support staff
- 38 Which one of the following statements about supplier management is INCORRECT?
- a) Supplier management negotiates operational level agreements (OLAs)
 - b) Supplier management ensures that suppliers meet business expectations
 - c) Supplier management maintains information in a supplier and contractor management information system
 - d) Supplier management negotiates external agreements to support the delivery of services
- 39 Which one of the following is a primary purpose of business relationship management?
- a) Carrying out operational activities to support services
 - b) Ensuring all targets within service level agreements are met
 - c) Maximizing contract value and operational efficiency of the services that are delivered
 - d) Understanding the customer's needs and ensuring they are met
- 40 Which one of the following statements is an objective of the design coordination process?
- a) To ensure that service availability targets are met
 - b) To define, document, agree, monitor, measure and review service levels
 - c) To provide and maintain a single source of consistent information on all operational services
 - d) To monitor and improve the performance of the service design lifecycle stage



The ITIL® Foundation Examination

Sample Paper B, version 5.0

Multiple Choice

ANSWERS AND RATIONALE

Answer Key and Rationale:

| Q | A | Syllabus Ref | Book Ref | Rationale |
|----|---|--------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | A | 05-31 | SD 4.3.5.2 | "Representatives of all of the other processes need to be consulted for their opinion on what targets can be realistically achieved." |
| 2 | D | 05-51 | ST 4.2.4.3 | Standard changes would not normally need to be implemented as soon as was possible, whereas emergency changes would. |
| 3 | B | 06-01 | SO 6.3.2 | The service desk is a function and not a process. |
| 4 | A | 01-09 | SS 2.2.3.1 | Functions are not described as being more costly than processes and this would depend on the function or process being considered. |
| 5 | C | 06-02 | SO 6.5.1 | "Facilities management refers to the management of the physical IT environment, typically a data centre or computer rooms". |
| 6 | A | 05-45 | SD 4.5.2 | Performance issues are within the scope of capacity management. |
| 7 | B | 03-32 | SO 4.4.7.2 | A – The KEDB is part of the SKMS, NOT the same thing. B is correct. C – Duplication should be avoided but by RESTRICTING access. D – Yes, the service desk should use it but they are NOT the only ones. |
| 8 | D | 04-10 | CSI 4.1.12 5.5 | Each statement is a summary of the book content. |
| 9 | C | 03-18 | ST 4.3.4.3 | The configuration management system (CMS) is responsible via its various data sources (CMDBs, etc) for maintaining these relationships. |
| 10 | C | 01-04 | SS 3.2.1.2 | The service provider should ensure due diligence is carried out against the customer's requirements, irrespective of whether they are internal or external customers. |
| 11 | A | 05-72 | SO 4.4.6.4 | Problem management is the source of known errors but change and service asset and configuration management are likely to be other sources of information about the impact of changes. |
| 12 | D | 05-71 | SO 4.2.5 | A – There do not need to be discernable impacts to the user for an incident to be raised. B – even if a workaround is available it needs to be recorded to measure any on-going impact of the incident. C - All incidents must be recorded. D – Correct, in order to prevent loss of service or to restore service as soon as possible. |
| 13 | D | 01-08 | SS 2.1.5 | D is the correct response. Stakeholders can be both internal and external entities. An example of a function as a stakeholder could be the service desk, technical management or application management functions. |
| 14 | A | 05-63 | ST 4.3.2 | All activities are part of the scope of service asset and configuration management. |
| 15 | D | 04-04 | SD 3.1.1 | All of these items are aspects of service design. |
| 16 | B | 01-10 | SS 2.2.2 | A – Process design would involve allocation of activities to functions but not their definition. B – Correct – processes deliver results or they would not be worthwhile. C – Not ALL processes are carried out by external providers. D – Is a description of a function. |
| 17 | B | 05-61 | ST 4.4.2 | All are activities performed by release and deployment management. |
| 18 | A | 03-30 | SO 4.4.5.6 | A is a good example of a workaround which is not a permanent solution but which overcomes the original incident. B is a 'lucky' incident resolution and unlikely to be repeatable. C does not allow the user to continue with their original task. D is an incident under investigation. |
| 19 | D | 08-02 | SS 7.1 | All four areas can be assisted by technology. |
| 20 | D | 03-42 | CSI 3.8 | The four key stages of the cycle are Plan, Do, Check and Act. |
| 21 | D | 05-46 | SD 4.6.1 | ITSC provides the subject matter expertise and supplier management provides the contract negotiation and selection process. SLM also has a role in underpinning contracts but is not as significant in this respect as the other two processes. |

| Q | A | Syllabus Ref | Book Ref | Rationale |
|----|---|--------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22 | C | 05-71 | SO 4.2.4.2 | C matches the description of an incident model. |
| 23 | A | 07-02 | SD 3.7.4.1 | Roles are Responsible, Accountable, Consulted, Informed. |
| 24 | D | 02-03 | SS 1.1.1 | Deciding what services should be offered and to whom is an integral part of service strategy. |
| 25 | D | 02-11 | CSI 1.1.1 | 1. CSI looks for ways to improve process effectiveness and efficiency, as well as cost effectiveness. 2. CSI identifies and implements improvements to IT services 3. CSI improvement activities support each lifecycle stage: service strategy, service design, service transition, service operation, and CSI itself. |
| 26 | D | 05-31 | SD 4.3.5.1 | Priority-based, technology-based and location-based SLAs are not discussed in service design. |
| 27 | B | 03-24 | SO 4.1 | A and C may cause an event to be generated. D is a meeting. B closely matches the definition of an event in service operation. |
| 28 | A | 04-02 | SS 3.2.3 | Value is viewed as the level to which the service meets customer's expectations and therefore they make the ultimate decision on whether the service will drive value. |
| 29 | A | 03-26 | SO 4.2 | An incident is "an unplanned interruption to an IT service or reduction in the quality of an IT service... or a failure of a CI that has not yet impacted an IT service...". The inability to access an IT service as agreed is an unplanned interruption from the user's perspective. |
| 30 | C | 05-51 | ST 4.2.4.5 | A – A change model can be used for emergency changes. B – Change models would not routinely be created when significant changes are made. C is correct. D – Escalation procedures can be included in a change model. |
| 31 | C | 04-09 | CSI 3.1.1 | Understanding "where are we now" requires a business to create a baseline. |
| 32 | A | 05-81 05-82 | SO 4.1.1 4.3.1 | All of the service operation processes are covered by the syllabus. The correct answer is A, B is a process and a function, C is a function and a process, D are processes in service transition and service design. |
| 33 | C | 02-07 | ST 1.1.1 | Service transition is responsible for this as part of the deployment of new services. |
| 34 | D | 07-01 | SD 6.3.1 | 1, 3 and 4 are all responsibilities of the service owner role. Option 2 is the responsibility of the configuration librarian/administrator. |
| 35 | D | 05-42 | SD 4.4.1 4.4.2 | D is the responsibility of IT service continuity management. |
| 36 | D | 04-03 | SD 3.1.5 | 1 – The "four Ps" are not a process. 2 – Has some merit but only addresses two of the four areas. 3 – The four Ps are not a checklist or set of questions. |
| 37 | D | 05-72 | SO 4.4.5.10 | D is the book answer. A is the right role but it is not about apportioning blame. B is incorrect. C is plausible but is facilitated by the wrong role. |
| 38 | A | 05-44 | SD 4.8.1 | All are objectives of the supplier management process, except A which is undertaken by service level management. |
| 39 | D | 05-23 | SS 4.5.1 | "To identify customer needs and ensure that the service provider is able to meet these needs..." |
| 40 | D | 05-47 | SD 4.1.1 | D is the correct answer. C is the purpose of service catalogue management. B is an objective of service level management. A is an objective of availability management. |

