
上海翰纬信息管理咨询有限公司

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卓越 IT 管理，翰纬智造！

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Service Level Management

Questions:(Total 40 points)

Questions:

1. what is an SLA?(5 points)

A written agreement between an IT Service provider and the IT Customer(s), defining the key service targets and responsibilities of both parties. The emphasis must be on agreement and SLAs should not be used as a way of holding one side or the other to ransom. A true partnership should be developed between the IT provider and the Customer, so that a mutually beneficial agreement is reached, otherwise the SLA could quickly fall into disrepute and a culture of blame prevent any true service quality improvements from taking place.

2. In your own words, describe 5 benefits of having a Service Level Management process in your organization(5 points)

- IT Service are designed to meet Service Level Requirements
- Improved relationships with satisfied Customers
- Both parties in the agreement have a clearer view of roles and responsibilities thus avoiding potential misunderstanding or omissions
- Specific targets to aim for and against which service quality can be measured, monitored and reported – ‘if you aim at nothing, that is usually what you hit’
- IT effort is focused on those areas that the business thinks are key
- IT and Customers have a clear and consistent expectation of the level of service required(i.e. everyone understands and agree what constitutes a ‘Priority One’ Incident, and everyone has a consistent understanding of what response and fix times are associated with something called ‘Priority One’)
- Service monitoring allows weak areas to be identified, so that remedial action can be taken (if there is a justifiable business case),thus improving future service quality
- Service monitoring also shows where Customer or User actions are causing the fault and so identify where working efficiency and/or training can be improved
- SLM underpins supplier management (and vice versa) – in cases where services are outsourced the SLAs are a key part of managing the relationship with the third-party-in other cases service monitoring allows the evaluated and managed
- SLA can be used as a basis for Charging – and helps demonstrate what value Customers are

receiving for their money

3. List 5 possible problems that can be experienced with service level management(5 points)

- Monitoring of pre-SLA achievements (particularly achieving the same perception as that held by the Customers) – this is perhaps the most difficult problem that must be addressed first, as it impacts upon the next three
- Ensuring targets are achievable before committing to them
- verifying targets prior to agreement
- SLAs that are simply based upon desires rather than achievable targets
- Inadequate focus, resources and time – often SLM is seen as something that can be done 'in the margins of time'- the ongoing resources are sometimes overlooked
- Not enough seniority/authority given to Service Level Management to push through negotiations/improvements
- SLAs may not be supported by adequate contracts or underpinning agreements
- The responsibilities of each party are not clearly defined, creating a danger that can some things fall 'between the cracks' and both parties deny responsibility for them
- Being IT based rather than business aligned, especially where the business does not know its requirements
- SLAs may be too lengthy, not concise, not focused
- SLAs are not properly communicated
- For companies, SLM may be seen as an overhead rather than a Chargeable service
- Many IT and business people seeing the SLM process primarily as an exercise in contract
- Arbitration, to the exclusion of one of the primary aims of the SLM process: relationship building
- As a result, the SLM process can become an exercise in 'relationship breaking'.

4. Describe three types of SLA structure. (6 points)

Service based

Where an SLA covers one service, for all the Customers of that service. For example an SLA may be established for an organization's E-mail service, covering all of the Customers of that service.

Customer Based

An agreement with an individual Customer group, covering all the services they use. For example, agreements may be reached with an organization's Finance Department covering, say, the Finance System, the Accounting System, the Payroll System, the Billing System, the Procurement System and any other IT systems that they use

Multi Level SLA's

Some organizations have chosen to adopt a multi-level SLA structure. For example, a three-layer structure as follows:

- 1) Corporate Level: covering all the generic SLM issues appropriate to every Customer throughout the organization. These issues are likely to be less volatile and so updates are less frequently required.
- 2) Customer Level: covering all SLM issues relevant to the particular Customer group, regardless of the service being used.
- 3) Service Level: covering all SLM issues relevant to the specific service, in relation to this specific customer group(one for each service covered by the SLA).

5. Which two other ITIL processes are involved in the Service

Improvement Programme ? Give reasons for your choice.(4 points)

Where an underlying difficulty has been identified which is adversely impacting upon service quality, Service Level Management must, in conjunction with Problem Management and Availability Management, instigate a SIP to identify and implement quality.

Problem Management-as this is the process responsible for solving the underlying causes that affect the services provided.

Availability Management- this is the process that is responsible for the managing the availability of the service to the customer.

6. List and describe 5 features that would be included in an SLA. (5 point)

Introduction
 Service Hours
 Availability
 Reliability
 Support
 Throughput
 Transaction Response time
 Change
 IT Service Continuity and Security
 Charging
 Service Reporting and Reviewing
 Performance Incentives and Penalties

7. List and describe 5 key Performance Indicators for SLM. (5 points)

The following key Performance Indicators (KPIs) and metrics can be used to judge the efficiency and effectiveness of the SLM processes and function:

- What number or percentage of Service is covered by SLAs?
- Are Underpinning contracts and OLAs in place for all SLAs and for what percentage?

- Are SLAs being monitored and are regular reports being produced?
- Are review meetings being held on time and correctly minuted?
- Is there documentary evidence that issues raised at reviews are being followed up and resolved (e. g. via an SIP)?
- Are SLAs, OLAs and underpinning contracts current and what percentage are in need of review and update?
- What number or percentage of Service targets are being met and what is the number and severity of service breaches?
- Are service breaches being followed up effectively?
- Are service level achievements improving?
- Are Customer perception statistics improving?
- Are IT costs decreasing for service with stable (acceptable but not improving) Service level achievements

8. List and describe 5 key skills needed by a Service Level Manager. (5 points)

- Relationship Management skills
- A good understanding of the IT Providers services and qualifying factors in order to understand how Customer requirements will affect delivery
- An understanding of the customer's business and how IT contributes to the delivery of that product or service
- Excellent communication and negotiation skills
- Patience, tolerance and resilience
- Knowledge and experience of contract and/or supplier management roles
- Good people management and administrative skills
- Good understanding of statistical and analytical principles and processes
- Good presentational skills
- Reasonable numeric skills
- The ability to interact successfully with all levels of the customer and IT Provider organization
- Reasonable technical understanding and an ability to translate technical Requirements and specifications into easily understood business concepts and vice versa
- Innovative in respect of service quality and ways in which it can be improved within the bounds of
- The organization's limits (resource, budgetary, legal etc.)
- A good listener with the ability to apply the knowledge gained effectively
- Even-handed and fair in dealings with other parties.

Financial Management

Questions: (Total 40 points)

1. Name the three activities of Financial Management. Which activity helps influence the customers and users use of IT Services? (5 marks)

Answers:

Budgeting, Accounting, Charging

Charging influences behavior.

2. Outline the three depreciation methods described in the ITIL

Framework? (6 marks)

The depreciation methods used should be the ones most appropriate having regard to the types of assets and their use in the business. The Finance department gives guidance in this. The most common methods of assessing depreciation are:

- I Straight line method – where an equal amount is written-off the value of the asset each year. Usually a fixed percentage of purchase cost, this results in the item having zero Net Book Value after a pre-set number of years (although it may continue to be used).
- I Reducing balance method – where a set percentage of the capital cost is written-off the Net Book Value each year. Often this is of the form 40% in the first year, 30% in the second year and 30% in the last year. The Net Book Value is the capital cost minus the depreciation written-off to date.
- I By usage – where depreciation is written-off according to the extent of usage during a period. It is usual to estimate the total useful 'life' of a device and to calculate the proportion of this that has been 'used' during the year. For example, a laser printer may be estimated to have a useful 'life' of 5,000,000 pages. If the average usage is 1,000,000 pages in a year, it can be depreciated by 20% in that year. Again, an anomaly arises if after 5 years it is still in use.

The Finance department may require IT assets to be 'written-off' before the end of their useful life, increasing the apparent cost of service but facilitating a charging system that generates revenue for the early replacement of systems.

3. Name and describe 3 of the 4 listed Pricing methods with respect to charging for IT service. (9 points)

Cost

The cost can be defined in several ways, for example:

- I Full cost (calculated as a total cost of ownership, including depreciation/planned renewal)

I Marginal cost (the cost of providing the service now, based upon the investment already made).

Cost plus

There are a number of cost-plus pricing models. The basic form is:

Price = cost + x%

The mark-up (x %) can either be set by the organization as a standard

Target Return, comparable with returns on other business investments, or varied by the IT organization to meet strategic business needs e.g.

encouraging the use of strategic applications but discouraging the use of legacy applications.

Cost plus may be used for large one-off original projects where the costs cannot be easily predicted. The contract protects the supplier.

Going rate

The price is comparable with other internal departments within the organization or with similar organizations.

Market price

The price is the same as that charged by external suppliers. Care should be exercised in asking external suppliers to quote prices – they may well disguise a discount to gain the business.

Fixed price

The IT organization sets a price based upon negotiation with the Customer for a set period, based upon a predicted consumption.

However the prices are determined, it is essential that they are visible to Customer so that they can tailor their budget forecasts and Service Level Requirements to match the likely costs.

4. Provide your reasoning as to why the activity of charging is optional, instead of mandatory. (5 points)

Looking for sound reasoning (eg . Company policy is that shared services are not charged for, cultural considerations, perhaps also competitive pressures may require Management to not want staff to be thinking of IT costs).

5. What are the three types of “centers” that can be considered when looking at IT Accounting systems? (6 points)

- a) Accounting Centre – simply costing inputs with maybe some element of Budgeting. The benefit of this policy is that sound IT Accounting focuses awareness on costs and enables investment decisions to be better founded, without the overheads of billing and bookkeeping. However, it is less likely to shape Users’ behaviour and does not give the IT organization the full ability to choose how to financially manage itself, for example in funding IT investment.
- b) Recovery Centre – costing outputs (services) and simply apportioning those costs. Organizations running as Recovery Centers are designed to account fully for all IT spend and recover it from the Customers. These accounts include both cash and non-cash costs

that, in effect, identify the full economic cost of running the business. The benefits of running as a Recovery Centre (before Charging is considered) include improved cost control over service provision, recognition of true costs by Customers and consistency in approach by different organizations.

- c) Profit Centre- the full panoply of separate Accounting. A Profit Centre is a method of managing the IT organization in which it has sufficient autonomy to operate as a separate business entity but with business objectives set by the organization. A profit Centre can be created with the business objective of making a profit, breaking even or operating with a subsidy. The key characteristics are that:
- i. Deliverables or products are clearly identified and sold into a marketplace
 - ii. Each product or service carries a price tag.

6. Outline the Role, Responsibilities and key skills required of the Finance Manager. (9 points)

Role

To work, at an appropriate level, with representatives of the organization management and the Finance Department, to develop the policies of Budgeting, IT Accounting and Charging.

To implement and maintain the IT Financial Management process, convening Budgeting, IT Accounting and Charging.

To assist in developing account plans and investment cases for the IT organization and its Customers.

Responsibilities

Budgeting

- n Manage the IT organization budget
- n Prepare budget forecasts and assist customers in preparing IT elements of their budgets
- n Report regularly to IT managers and customers on conformance to budgets.

IT Accounting

- n Select suitable tools and processes for gathering cost data
- n Develop suitable cost models
- n Agree suitable IT Accounting policies, e.g. depreciation
- n Assist in developing cost- benefit cases for IT investments
- n Advise senior management on the cost- effectiveness of IT solutions.

Charging

- n Identify methods of charging within the organization's charging policy
- n Provide justifications and comparisons for charges
- n Prepare regular bills for customers
- n Prepare a price list of service, if required.

Other

- n Provide close support to Service Level Management, Capacity Management, Capacity Management and Business relationship Management, especially during budget and IT investment planning
- n Recommend scope for internal audits
- n Assist external auditors.

Key skills

- n Sound numerical and financial skills
- n Ability to interact successfully with all levels of customer and IT organization management
- n Thorough approach to documentation and schedules
- n Excellent communication and negotiation skills
- n Good presentational skills.

Relevant knowledge or experience

- n Understanding of the customers' businesses and how IT can affect the delivery of their products or service
- n Accountancy and company financial reporting
- n Contract or supplier management
- n Statistical and analytical principles and processes

Capacity management

Questions: (Total 40 points)

1. list five things that capacity management is responsible for.(5points)

- I ensures that appropriate levels of monitoring of resources and system performance are set ,and that the information recorded in a CBD is kept up-to-date and used by all parts of the Capacity Management process
- I produces Capacity Plans in line with the organization's business planning cycle, identifying Capacity requirements early enough to take account of procurement lead times.
- I documents the need for any increase or reduction in hardware based on SLRs and cost constraints
- I produces regular management reports which include current usage of resources, trends and forecasts
- I sizes all proposed new systems to determine the computer and network resources required, to determine hardware utilisation, performance service levels and cost implications
- I assesses new hardware and software products for use by Capacity Management that might improve the efficiency and effectiveness of the process
- I carries out performance testing of new systems
- I reports on performance against targets contained in SLAs
- I maintains a knowledge of future demand for IT Services and predicts the effects of demand on performance service levels
- I determines performance service levels that are maintainable and cost justified
- I recommends tuning of systems and makes recommendations to IT management on the design and use of systems to help ensure optimum use of al hardware and operating system software resources
- I recommends resolutions to performance-related Incidents and Problems
- I recommends to IT management when to employ Demand Management, to dampen Customer demands on systems
- I carries out ad-hoc performance and Capacity studies on request form IT management
- I ensures requirements for reliability and Availability are taken into account in all Capacity planning and sizing activity
- I is represented on the CAB, assessing and authorizing Changes
- I ensures that regular and ad hoc audits are carried out on the Capacity Management process.

2. List Five Critical Success Factors for Capacity Management and in your

own words describe why they are important.(10 points)

- I accurate business forecasts
- I knowledge of IT strategy and plans, and that the plans are accurate
- I an understanding of current and future technologies
- I an ability to demonstrate cost effectiveness
- I interaction with other effective Service Management processes

I an ability to plan and implement the appropriate IT Capacity to match business need.

3. One of the inputs to the Capacity Database is Business data. List 5

types of Business data that may be captured in the CDB(5 points)

- I number of accounts and products supported
- I number of calls into call centers
- I number and location of branches
- I number of registered Users of a system
- I number of PCs
- I anticipated workloads
- I seasonal variations of anticipated workloads
- I number of web site business transactions.

4. There are 3 Sub-processes within Capacity Management. List them

and explain each sub process, in your own words! (9 points)

- I Business Capacity Management: This sub-process is responsible for ensuring that the future business requirements for IT Services are considered, planned and implemented in a timely fashion. This can be achieved by using the existing data on the current resource utilization by the various services to trend, forecast or model the future requirements. These future requirements come from business plans outlining new services, improvements and growth in existing services, development plans etc.
- I Service Capacity Management: The focus of this sub-process is the management of the performance of the live, operational IT Services used by the Customers. It is responsible for ensuring that the performance of all service, as detailed in the targets in the SLAs and SLRs, is monitored and measured, and that the collected data is recorded, analysed and reported. As necessary, action is taken to ensure that the performance of the necessary, action is taken to ensure that the performance of the services meets the business requirements. This is performed by staff with knowledge of all the areas of technology used in the delivery of end-to-end service, and often involves seeking advice from the specialists involved in Resource Capacity Management
 - I Resource Capacity Management: The focus in this sub-process is the management of the individual components of the IT Infrastructure. It is responsible for ensuring that all components within the IT Infrastructure that have finite resource are monitored and measured, and that the collected data is recorded, analysed and reported. As necessary, action must be taken to manage the available resource to ensure that the IT Services that it supports meet the business requirements. In carrying out this work, the Capacity Management process is assisted by individuals with specialist knowledge in the particular areas of technology

5. What specific concept should the Resource Capacity Management

sub-process help identify in the IT Infrastructure or any subset of it, in

conjunction with the Availability Management process? (1points)

Resilience

6. Explain Moore' s law and its relevance for Capacity Management (3 points)

Moore' s Law In 1965 Gordon Moore, one of the founders of Intel, observed that each new memory chip produced contained about twice as much processing Capacity as its predecessor, and that new chips were released every 18 – 24 months. This trend has continued ever since leading to an exponential increase in processing power.

The relevance should be a realistic statement of how this.

7. List 5 things that would fall within the scope of Capacity Management. (5 points)

- I all hardware – from PCs, through file servers, up to mainframes and supercomputers
- I all networking equipment (LANs, WANs, bridges, routers etc.)
- I all peripherals (bulk storage devices, printers etc.)
- I all software – operating system and network software, in-house developments and purchased packages
- I human resources, hut only where a lack of human resources could result in a delay in end-to-end response time (e.g. overnight data backups not completed in time because no operators were present to load tapes) – in general human resource management is a line management responsibility, though the staffing of a Service Desk might well use identical Capacity Management techniques.

8. The iterative activities of Capacity Management are important. In your own words explain this cycle. (2 points)

Monitoring, analysis, tuning and implementation with a reasonable explanation .

Availability Management

Questions: (Total 40 points)

1. What are the activities of Availability Management? (5 points)

- I Determine Availability requirements from the business for a new enhanced IT service and formulating the Availability and recovery design criteria for the IT infrastructure
- I In conjunction with ITSCM determining the vital business function and impact arising from IT components failure. Where appropriate reviewing the Availability design criteria to provide additional resilience to prevent or minimize impact to the business
- I Defining the targets for Availability, reliability and maintainability for the IT infrastructure components that underpin the IT Service to enable these to be documented and agreed within SLAS, OLAs and contracts
- I Establishing measures and reporting of Availability , Reliability and Maintainability that reflects the business, user and IT support organization perspectives
- I Monitoring and trend analysis of the Availability, Reliability and Maintainability of IT components
- I Reviewing IT Service and component Availability and identifying unacceptable levels
- I Investigating the underlying reasons for unacceptable Availability
- I Producing and maintaining an Availability plan which prioritises and plans IT Availability improvements.

2. Describe the main difference between Availability Management and IT Service Continuity Management? (3 points)

Availability Management is not responsible for restoring business processes after a disaster. This is the responsibility of IT Service Continuity Management. ITSCM provides Availability Management with information about critical business processes. Also, in practice, many measures are taken to enhance Availability also enhance IT Service Continuity, and vice versa.

3. What is a Vital Business Function? In relation to previous or current work experience, provide an example of a VBF? (3 points)

The term Vital Business Function (VBF) is used to reflect the business critical elements of the Business. Process supported by an IT Service. An IT service may support number of business functions that are less critical. For example an ATM service VBF would be the dispensing of cash. However the ability to obtain a mini statement print from an ATM may not be considered as vital. This distinction is important and should influence Availability design and associated costs.

4. Two key design activities for the Availability Management process are...?

(4 points)

Designing for Availability is a key activity driven by Availability Management. This ensures that the required level of Availability for an IT Service can be met.

Availability Management needs to ensure that the design activity for Availability looks at the task from two related but distinct perspectives:

DESIGNING FOR AVAILABILITY: This relates to the technical design of the IT Infrastructure and the alignment of the internal and external suppliers required to meet the Availability requirements for an IT Service.

DESIGNING FOR RECOVERY: This relates to the design points required to ensure that in the event of an IT Service failure, the service can be reinstated to enable normal business operations to resume as quickly as is possible.

4. Name and describe 5 methods or techniques that are used to identify

Availability Improvement opportunities. (10 points)

Component Failure Impact Assessment

Component Failure Impact Assessment(CFIA)can be used to predict and evaluate the impact on IT Service arising from component failures within the IT Infrastructure. The output from a CFIA can be used to identify where additional Infrastructure resilience should be considered to prevent or minimize the impact of component failure to the business operation and Users.

Fault Tree Analysis

Fault Tree Analysis (FTA) is a technique that can be used to determine the chain of events that causes a disruption to IT Services. FTA in conjunction with calculation methods can offer detailed models of Availability. This can be used to assess the Availability improvement that can be achieved by individual IT Infrastructure design options.

CRAMM

CRAMM can be used to identify new risks and provide appropriate countermeasure associated with any Change to the business Availability requirement and revised IT Infrastructure design.

Systems Outage Analysis

Systems Outage Analysis (SOA) is a technique designed to provide a structured approach to identifying the underlying causes of service interruption to the User. SOA utilizes a range of data sources to assess where and why shortfalls in

Availability are occurring. SOA enables an holistic view to be taken to drive not just IT Infrastructure improvements but improvements to the IT support organization process, procedures and tools.

The Expanded Incident ' Lifecycle'

An aim of Availability Management is to ensure the duration and impact from Incidents impacting IT Service are minimized, to enable business operations to resume as quickly as is possible.

The expanded Incident ' lifecycle' enables the total IT Service downtime for any given Incident to be broken down and mapped against the major stages that all Incidents progress through (the lifecycle).

This makes it possible to identify where ' time is being lost ' and provides the basis for the identification of improvements that can improve recovery and restoration times.

Continuous Improvement

Availability Management can play an important role in helping the IT support organization recognise where they can add value by exploiting their technical skills and be used by Availability Management to harness this technical capability. This can be used with either small groups of technical staff or a wider group within a workshop Environment.

Technical Observation Post

A Technical Observation Post (TOP) is a prearranged gathering of specialist technical support staff from within the IT support organization brought together to focus on specific aspects of IT Availability.

6. Name 3 functional areas that you would consult with during the creation of an Availability Plan, Give reasons why. (6 points)

- I Service level Management, concerning changing business and User requirements for existing IT Services
- I IT Service Continuity Management concerning business impact and resilience improvements
- I Business Relationship Management to understand major Customer concerns and/or future needs that relate to IT Availability
- I Capacity Management, concerning the scenarios for upgrading (or downgrading)the software, hardware and network layers of the IT Infrastructure
- I IT Financial Management concerning the cost and budget implications of the various options identified for Availability improvement
- I Application Management, concerning the Availability requirements for new services
- I areas responsible for IT supplier management and the managing of relationships and contracts with suppliers
- I technical support groups responsible for testing and maintenance functions, concerning the reliability and maintainability of existing services

7. Describe 3 measures of availability management. (3 points)

- I MTBF (Mean Time Between Failures) – the average elapsed time from the time an IT Service or supporting component is fully restored until the next occurrence of a failure to the same service or component
- I MTBSI (Mean Time Between System Incidents) – the average elapsed time between the occurrence of one failure and the next failure
- I MTTR (Mean Time To Repair) – the average elapsed time from the occurrence of an Incident to Resolution of Resolution of the Incident.

8. Name 3 key skills that an Availability Manager would need to possess.

(3 points)

- I to have practical experience of process management
- I to have a good understanding of the ITIL disciplines
- I to have practical experience of continuous improvement methods and techniques
- I to have a good understanding of statistical and analytical principles and processes
- I to possess good interpersonal skills for written oral and face to face communications
- I to possess skills in influencing and negotiation methods and techniques
- I to have reasonable numeric skills
- I to have a good understanding of available and emerging IT technologies
- I to have the ability to understand how the IT technology supports the business
- I to have a reasonable understanding of Cost Management principles

9. Name 3 key responsibilities of an Availability Manager. (3 points)

- I to be accountable for the deployment of the Availability Management process and associated methods and techniques and techniques
- I to be responsible for ensuring the Availability Management process its associated techniques and methods are regularly reviewed and audited and that all of these are subjected to continuous improvement and remain fit for purpose
- I to be responsible for determining the Availability requirements from the business for new or enhanced IT Services
- I to be responsible for the creation of Availability and recovery design criteria to be applied to new or enhanced Infrastructure design
- I to be responsible for ensuring the levels of IT Availability required are cost justified
- I to be responsible for defining the targets of Availability required for the IT Infrastructure and its components that underpin a new or enhanced IT Service as the basis for an SLA agreement
- I to be responsible for the establishment of measures and reporting that reflect business User and IT support organization requirements
- I to be responsible for the monitoring of actual IT Availability achieved vs targets and to ensure shortfalls are addressed
- I to be responsible for the production and maintenance of an Availability plan which prioritises and plans IT Availability improvements
- I To promote Availability Management awareness and understanding within the IT support organization
- I to maintain an awareness of technology advancements and IT best practice e.g.ITIL

IT Service Continuity Management

Questions: (Total 40 points)

1. List and describe the 5 Recovery options. (5 Marks)

- Warm site : Recovery about 24 hours
- Cold site : recovery period about 10 days
- Hot site : Mirroring (immediate)
- Do Nothing
- Reciprocal recovery – using the facilities together

2. How do I implement effective ITSCM? (2 Marks)

- According to SLA we define the type of recovery option for each service catalogue
- Monitoring reporting and implementation

3. List and describe the three activities covered under Stage 2 of IT Service Continuity Management. (6 Marks)

Stage 2 of IT Service Continuity –Requirement & Strategy

- 1) Business impact analysis – I
- 2) Risk management
- 3) Plan of ITSCM

4. How does change management contribute to the process? (2 Marks)

5. List and describe the 4 Stages of ITSCM. (4 Marks)

- Initiation
- Requirement & Strategy
- Implementation
- Operational management

6. List and explain 6 benefits of ITSCM. (12 Marks)

- Low premium insurance
- Good business relationship
- Reduction of Risk – with this process we make a proactive risk management so we reduce risk that vulnerability of it asset it infrastructure
- Competitive other customer
- Reliability of customer

7. Describe the information flow between ITSCM and any three of the following processes: Service Level Management Financial Management Capacity Management Availability Management Change Management Service Desk / Incident Management Problem Management Configuration Management? (9 Marks)

process	Input to ITSCM	Output from ITSCM
Service level management	SLR based on customer requirement.	Recommended ITSCM level according to business continuity requirements
Financial management	Budget for IT service	Actual cost in order to increase ITSCM
Capacity management	Actual capacity utilization	Revised ITSCM level based on actual capacity utilization
Availability management	Actual availability status	Revised ITSCM level based on current availability status
Change management	Change information related ITSCM	Up-to-date ITSCM plan according to changes
Service desk/ incident management	Incidents related ITSCM	Up-to-date ITSCM plan according to incidents
Problem management	Problems and known error related ITSCM	Up-to-date ITSCM plan according to problems
Configuration management	Agreed business continuity requirement	Updated ITSCM plan according to customer requirements

Service Desk/Incident Management

Questions: (Total 40 points) – Mark:

1. what is a call centre? (2 points)

The main emphasis on professionally handling large volumes of telephone-based transactions for commodity services (e. g. banking insurance)

2. Explain the considerations when setting up a virtual Service Desk. (5 points)

- I All persons accessing the virtual Service Desk should use common processes procedures and terminology
- I A common agreed-on language should be used for data entry
- I Customers and Users still need to interact with a single point of contact. Consider global telephone numbers local numbers that route to the Virtual Desk and Automatic Call Distribution (ACD) technology
- I There will be the need for a physical presence on site by a specialist or maintenance engineer from time to time
- I Network performance should be fit for purpose . This should be reviewed in terms of forecast workloads .For example if the local Service Desk in Sydney is only handling ten requests a day then network volume may not be a major consideration. However a narrow bandwidth is not practical if several hundred requests are processed
- I For the Virtual Desk the support tools in place should allow for workload partitioning and authorized views. (For example if I am the person looking after local support in say Amsterdam I only want to see requests for that location .)This should include other associated processes and related data such as planned Changes asset and configuration data
- I Consistent ownership and management processes for Incidents and Incident views between local desks

3 What are the main actions to be carried out by the Service Desk on receipt of an Incident notification? (4 points)

- I record basic details – this includes timing data and details of symptoms obtained
- I If a service request has been made the request is handled in conformance with the organization's standard procedures
- I from the CMDB the Configuration Items (CI) reported as the cause for an Incident is selected to complete the Incident record
- I the appropriate priority is assigned and the User is given the unique system- generated Incident number (to be quoted at the beginning of all further communication)
- I the Incident is assessed and if possible resolution advice is given : this frequently will be possible for routine Incidents or when a match to a known problem/error is achieved

- I following successful resolution the Incident record is closed : details of the resolution action and the appropriate category code are added
- I the Incident is assigned to second- line support (i. e. a specialist group)following unsuccessful resolution or recognition that a further level of support is needed.

4 what data should be recorded during the Incident lifecycle?(5 points)

- I unique reference number
- I Incident classification
- I date/time recorded
- I name/id of the person and/or group recording the Incident
- I name/department/phone/location of User calling
- I call- back method (telephone mail etc)
- I description of symptoms
- I category (often a main category and a subcategory)
- I impact/urgency/priority
- I Incident status (active waiting closed etc)
- I related Configuration Item
- I support group / person to which the Incident is allocated
- I related problem / known Error
- I resolution date and time
- I closure category
- I closure date and time.

5 what are the possible problem areas that may need to be overcome when implementing Incident Management? (5 points)

- I no visible management or staff commitment resulting in non – availability of resources for implementation
- I lack of clarity about business needs
- I working practices not being reviewed or changed
- I poorly defined service objectives goals and responsibilities
- I no provision of agreed Customer service levels
- I lack of knowledge for resolving Incidents.
- I Inadequate training for staff
- I Lack of integration with other processes
- I Lack of, or expense of, tools to automate the process
- I Resistance to change.

6. What are the key points to consider when setting up a generic Service Desk? (4points)

- I First establish that business need is clearly identified and understood
- I Make sure management commitment, budget and resource is made available before commencement

- I Ensure the proposed solution aligns with your Service Support strategy and vision
- I Identify, achieve and communicate quick wins (e.g. keeping customers informed, improved installation times)
- I Define clear objectives and deliverables
- I Start simple; don't try to do everything at once; adopt a phased approach
- I Involve/consult your Customers, especially critically important ones; don't use jargon
- I Involve/consult end Users
- I Sell the benefits to support staff
- I Train IT staff to be service staff
- I Educate/train customers and Users in the use of the new service and its benefits
- I Advertise and 'sell' your service.

7. What metrics should be used to measure Key performance Indicators (KPIs) for the effectiveness and efficiency of the Incident Management

process? (5 points)

- I Total numbers of Incidents
- I Mean elapsed time to achieve Incident resolution or circumvention, broken down by impact code
- I Percentage of Incidents handled within agreed response time (Incident response time targets may be specified in SLAs, for example, by impact code)
- I Average cost per Incident
- I Percentage of Incidents closed by the Service Desk without reference to other levels of support

8. A successful self- service strategy (for deploying a totally automated Service Desk) depends on several important factors. What are these in your own words? (10 points)

- I Management commitment – any initiative that entails change within an organization requires management support and commitment to execute the initiative
- I A willingness to relinquish control – it is essential to put the right processes and tools in place to ensure that while the Customer is in control, they are following a path that is carefully designed by the company
- I Business metrics are collected and used – to monitor the effectiveness of the service as provided, it is critical to know what self- help services are being requested, how often and what for
- I Support processes are maintained – it is important that none of the existing change and Release processes is bypassed or invalidated
- I Ease of use and quality content – any system that is not easy to use or that does not contain high-quality content will fail, because if Customers are unable to get the information they need when they need it, they will immediately pick up the telephone next time they encounter a problem; indeed, in a worst-case scenario, the support team will find itself supporting yet

another application-the self-service system itself

- I Communication – Customers need to know what self-service channels are in place, along with the value and responsibilities of using them.

Problem Management

Questions: (Total 40 points) – Mark:

1. What is the goal of problem Management? (2 points)

The goal of Problem Management is to minimize adverse impact of Incidents and problems on the business that are caused by errors within the IT Infrastructure, and to prevent recurrence of Incidents related to these errors. In order to achieve this goal, Problem Management seeks to get to the root cause of Incidents and then initiate actions to improve or correct the situation.

2. What are the major activities of Problem Management? (4 points)

- I Problem control
- I Error control
- I The proactive prevention of problems
- I Identifying trends
- I Obtaining management information from problem Management data
- I The completion of major Problem reviews.

3. What are the things that make 'Timing and planning' important in Problem Management? (6 points)

- I Good problem Management relies to a great extent on an implemented and efficient Incident Management process. SO it is sensible to implement Problem Management either in parallel with, or after Incident Management processes.
- I If resources are scarce, it is advisable to concentrate in the first instance on the implementation of Problem and error control (reactive Problem Management). When these activities reach maturity, resources can be directed to proactive problem Management. The quality of proactive Problem Management depends largely on successful implementation of service monitoring activities and the base data thereby captured.
- I Smaller organizations can introduce reactive Problem Management by focusing daily on the 'top ten' Incidents of the previous day. This can prove to be effective, since experience shows that 20% of problems cause 80% of service degradation!

4. When identifying trends, what can Incident and problem analysis identify? (5 points)

- I Trends, such as the post-Change occurrence of particular problem types
- I Incipient faults of a particular type
- I Recurring problems of particular type or with an individual item
- I The need for more customer training or better documentation.

5. When planning for problem Management there are some key success

factors. What are the points to consider? (6 points)

- I An effective automated registration of Incidents, with an effective classification, is fundamental for the success of problem Management.
- I Setting achievable objectives and making use of the problem-solving talents of existing staff is key activity. Consider 'part-time' problem Management, whereby staff set aside periods when they will look at problems away from the daily fire-fighting pressures.
- I In view of the potentially conflicting interests between Incident Management and problem Management, good cooperation between both processes is essential. Both also have enormous synergy, which can help. Support staff, often involved in both processes, should be aware of importance of balancing activities between the two.

6. The benefits of taking a formal approach to problem Management are well documented. What are the costs of not having a formal approach?

(3 points)

- I A purely reactive support organization, facing up to Problems only when the service to customers has already been disrupted
- I An IT user organization, confronted with recurring Incidents, losing faith the quality of the IT support organization
- I An ineffective support organization, with high costs and low employee motivation, since similar Incidents have to be resolved repeatedly and structural solutions are not provided.

7. What is the main difference between Incident and Problem Management? (4 points)

Problem Management differs from Incident Management in that its main goal is the detection of the underlying causes of an Incident and their subsequent resolution and prevention. In many situations this goal can be in direct conflict with the goals of Incident Management where the aim is to restore the service to the Customer as quickly as possible, often through a Work-around, rather than through the determination of a permanent resolution (for example, by searching for structural improvements in the IT infrastructure, in order to prevent as many future Incidents only of secondary (albeit still of significant) importance. Investigation of the underlying Problem can require some time and can thus delay the restoration of service, causing downtime but preventing recurrence.

8. What are the benefits of taking a formal approach to Problem Management? (10 points)

- I Improved IT service quality. Problem Management helps generate a cycle of rapidly increasing IT service quality. High-quality reliable service is good for the business users of IT, and good for the productivity and morale of the IT service providers.
- I Incident volume reduction. Problem Management is instrumental in reducing the number of Incidents that interrupt the conduct of business.

- I Permanent solutions. There will be a gradual reduction in the number and impact of Problems and known errors as those that are resolved stay resolved.
- I Improved organization learning. The Management process is based on the concept of learning from past experience. The process provides the historical data to identify trends, and the means of preventing failures and of reducing the impact of failures, resulting in improved user productivity.
- I Better first-time fix rate at the Service Desk. Problem Management enables a better first time fix rate of Incidents at the Service Desk, achieved via the capture, retention and availability of Incident resolution and Work-around data within a knowledge database to the Service Desk at all logging.

Configuration Management

Question: (Total 40 points) – Mark:

1. What is Configuration control concerned with? (2 points)

Configuration control is concerned with ensuring that only authorized and identifiable CI's are recorded from receipt to disposal. It ensuring that no CI is added, modified, replaced or removed without appropriate controlling documentation e.g. an approved Change request.

2. What factors should be considered when planning staff numbers for

Configuration Management? (5 points)

- I Whether Configuration Management can be assigned with other responsibilities, or whether it requires the undivided attention of specific individuals
- I Whether the Configuration Management team is to be responsible for projects as well as the IT infrastructure and services
- I Whether the group is to be part of a joint Change, Configuration and Release Management team
- I The size of the IT infrastructure, the level at which control is to be maintained, and hence the number of CI's to be controlled
- I The number of staff who will be performing control activities in other groups and projects
- I The extent to which support tools will be available
- I The size, frequency and complexity of Changes and Releases.

3. What should Management reports for Configuration Management

cover? (5 points)

- I Results of configuration audits
- I Information on any non-registered or inaccurately registered CI's that have been detected and the corrective action
- I Information on the number of registered CI's and CI versions, broken down by CI category, type and status (and possibly also by location or other CI attributes)
- I Growth and capacity information
- I Information on the rate of change of CI's/CMDB and the DSL
- I Details of any backlogs of configuration Management work or any delays caused by configuration management activities, and proposed remedies
- I The configuration management staffing position
- I The amount of authorized work done out of hours by other IT service staff
- I The results of efficiency/effectiveness reviews, growth reviews and audits of the configuration Management system and proposals for tackling actual or potential Problems
- I Data and analyses on the number of CI's by type (e.g. services, servers, routers, hubs, software licences, desktop PCs, etc)
- I The value of CI's (or assets)
- I The location of CI's by business unit, support group or service.

4. what can be a Configuration Item (CI)? (2 points)

CI's may be hardware, software or documentation.

5. What are the goals of Configuration Management? (4 points)

- I Account for all the IT assets and configurations within the organization and its services
- I Provide accurate information on configuration and their documentation to support all the other Service Management processes
- I Provide a sound basis for Incident Management, Problem Management, change Management and Release Management
- I Verify the configuration records against the infrastructure and correct any exceptions.

6. what are the basic activities of Configuration Management? (10 points)

- I Planning. Planning and defining the purpose, scope, objectives, policies and procedures, and the organizational and technical context, for Configuration Management.
- I Identification. Selecting and identifying the configuration structures for all the infrastructure's CI's, including their 'owner', their interrelationships and configuration documentation. It includes allocating identifiers and version numbers for CI's, labeling each item, and entering it on the Configuration Management Database (CMDB).
- I Control. Ensuring that only authorised and identifiable CI's are accepted and recorded, from receipt to disposal. IT ensures that no CI is added, modified, replaced or removed without appropriate controlling documentation, e.g. an approved Change request, and an updated specification.
- I Status accounting. The reporting of all current and historical data concerned with each CI throughout its life cycle. This enables Changes to CI's and their records to be traceable, e.g. tracking the status of a CI as it changes from one state to another for instance 'under development', 'being tested', 'live', or 'withdrawn'.
- I Verification and audit. A series of reviews and audits that verify the physical existence of CI's and check that they are correctly recorded in the Configuration Management system.

7. What is a Configuration Baseline? (3 points)

A Configuration baseline is the configuration of a product or system established at a specific point in time, which captures both the structure and details of a configuration. It serves as reference for further activities. An application or software baseline provides the ability to change or to rebuild a specific version at a later date.

A configuration baseline is also a snapshot, or a position, that is recorded. Although the position may be updated later, the configuration baseline remains fixed as the original state and is thus available to be compared with the current position. A configuration baseline is used to assemble all relevant components in readiness for a Change or Release, and to provide the basis for a configuration audit and regression, e.g. after a Change. The Configuration Management system should be able to save, protect and report on a configuration baseline, its contents and documentation.

8. Measurable targets for objective metrics should be set for the effectiveness of Configuration Management process. What Metrics could be included to set targets? (9 points)

- I Occasions when the 'configuration' is not as authorized
- I Incidents and Problems that can be traced back to wrongly made Changes
- I RFC's that were not completed successfully because of poor impact assessment, incorrect data in the CMDB, or poor version control
- I The cycle time to approve and implement Changes
- I Licences that have been wasted or not put into use at a particular location
- I Exceptions reported during configuration audits
- I Unauthorized IT components detected in use.

Change Management

Questions: (Total 40 points)

1. List and Describe 3 inputs into the Change Management process (6 points)

- ü RFC's
- ü CMDB
- ü Forward Schedule of Changes

2. List and describe 3 triggers for a Request for Change (6 points)

- ü Required resolution of an Incident or Problem report
- ü User or Customer dissatisfaction expressed via Customer liaison or Service Level Management
- ü The proposed upgrade to some component of the infrastructure
- ü Changed business requirements or direction
- ü New or changed legislation
- ü Location change
- ü Product or service changes from vendors or contractors

3. List 5 items that should be included in an RFC and the business benefit for including them. (5 points)

- ü RFC number (plus cross reference to problem report number, where necessary)
- ü Description and identity of item(s) to be changed (including CI identification(s) if Configuration Management system is in use)
- ü Reason for Change
- ü Effect of not implementing the Change
- ü Version of item to be changed
- ü Name, location and telephone number of person proposing the change
- ü Data that the change was proposed
- ü Change priority
- ü Impact and resource assessment (which may be on separate forms where convenient)
- ü CAB recommendations where appropriate (which may be held separately, with impact and resource assessments, where convenient)
- ü Authorization signature (could be electronic)
- ü Authorization date and time
- ü Scheduled implementation (Release identification and/or date and time)
- ü Location of Release/implementation plan
- ü Details of Change builder/implementer
- ü Back-out plan
- ü Actual implementation date and time
- ü Review date

- ü Review result (including cross-reference to new RFC where necessary)
- ü Risk assessment and management
- ü Impact on business continuity and contingency plans
- ü Status of RFC – i.e. 'logged' , 'assessed' , 'rejected' , 'accepted' , ' sleeping' .

4. What is the Change Advisory Board? (3 points)

The Change Advisory Board (CAB) is a body that exists to approve Changes and to assist Change Management in the assessment and prioritization of changes. As and when a CAB is convened, its members should be chosen who are capable of ensuring that all changes are adequately assessed from both a business and a technical viewpoint. To achieve this mix, the CAB needs to include people with a clear understanding of the customer business needs and the User community, as well as the technical development and support functions.

5. List 3 possible members of CAB, and give reasons why (6 points)

- ü Change Manager
- ü Customer(s)
- ü User manager(s)
- ü User group representative(s)
- ü Applications/maintainers (where appropriate)
- ü Experts/technical consultants
- ü Services staff (as required)
- ü Office services staff (where changes may affect accommodation and vice versa)
- ü Contractor's or third parties' representatives (as required – for instance in outsourcing situations)

6. List 5 benefits of Change Management (5 points)

- ü Better alignment of IT services to business requirements
- ü Increased visibility and communication of Changes to both business and service-support staff
- ü Improved risk assessment
- ü A reduced adverse impact of Changes on the quality of services and on SLAs
- ü Better assessment of the cost of proposed Changes before they are incurred
- ü Fewer Changes that have to be backed-out, along with an increased ability to do this more easily when necessary
- ü Improved Problem and Availability Management through the use of valuable management information relating to changes accumulated through the change Management process
- ü Increased productivity of Users- through less disruption and, higher-quality services
- ü Increased productivity of key personnel through less need for diversion from planned duties to implement urgent Changes or back-out erroneous Changes
- ü Greater ability to absorb a large volume of Changes
- ü an enhanced business perception of IT through an improved quality of service and a professional approach.

7. list the activities of Change Management (4 points)

- Planning the implementation of operational processes

- Change logging and filtering
- Allocation of priorities
- Change Categorisation
- CAB meetings
- Impact and Resource Assessment
- Change approval
- Change Scheduling
- Change Building, testing and implementation
- Urgent Changes
- Urgent Change building, testing and implementation
- Change Review / Evaluation

8. list and describe 5 Change Management Metrics (5 points)

- the number of Changes implemented in the period, in total and by CI, configuration type, service, etc.
- a breakdown of the reasons for Change (User requests, enhancements, procedures/training improvement, etc)
- the number of Changes successful
- the number of Changes backed-out, together with the reasons(e.g. incorrect assessment, bad build)
- the number of Incidents traced to Change (broken down into problem-severity levels) and the reasons (e.g. incorrect assessment, bad build)
- the number of FRCs (and any trends in origination)
- the number of implemented Changes reviewed, and the size of review backlogs (broken down over time)
- high incidences of FRCs/PRs relating to one CI (these are worthy of special attention), giving the reasons (e.g. volatile User requirement, fragile component, bad build)
- figures form previous periods (last period, last year) for comparison
- the number of RFCs rejected
- the proportion of implemented Changes that are not successful (in total and broken down by CI)
- Change backlogs, broken down by CI and by stage in the Change Management process.

Release Management

Questions: (total 40 points)

1. list at least three of the Goals of Release Management . (3 points)

- I to plan and oversee the successful rollout of software and related hardware
- I to design and implement efficient procedures for the distribution and installation of Changes to IT systems
- I to ensure that hardware and software being changed is traceable, secure and that only correct, authorized and tested versions are installed.
- I to communicate and manage expectations of the Customer during the planning and rollout of new Releases.
- I to agree the exact content and rollout plan for the Release, through liaison with Change management
- I to implement new software Releases of hardware into the operational environment using the controlling processes of Configuration management and Change Management –a Release should be under Change Management and may consist of any combination of hardware, software, firmware and document CIS
- I to ensure that master copies of all software are secured in the Definitive software library(DSL) and that the Configuration management database (CMDB) is updated
- I to ensure that all hardware being rolled out or changed is secure and traceable, using the services of Configuration Management.

2. The release policy describes what will be included and controlled in the release management process. What concepts would you include in the release policy? (5 points)

The Release policy covers Release numbering , frequency and the level in the IT infrastructure that will be controlled by definable Releases. The organization should decide the most appropriate approach, depending on the size and nature of the systems, the number and frequency of releases required, and any special needs of the Users – for example, if a phased rollout is required over an extended period of time. All

Releases should have a unique identifier that can be used by Configuration management.

A Release policy may say, for example, that only strict 'emergency fixes' will be issued in between formally planned Releases of enhancements and non-urgent corrections.

3. Name and describe 3 types of release. (6 points)

Full Release: All components of the Release unit are built, tested, distributed and implemented together. There is no danger that obsolete versions of CIs that are incorrectly assumed to be unchanged will be used within the Release. There is less temptation to short – circuit testing of supposedly unchanged CIs and of the interfaces form changed CIs to unchanged ones.

An examples of a Full Release could consist of the complete Release of a new version of client desktop software, or client desktop hardware, or both.

Delta Release: A delta, or partial, Release is one that includes only those CIs within the Release unit that have actually changed or are new since the last full or delta release. For example, if the Release unit is the program, a delta Release contains only those modules that have changed, or are new, since the last full Release of the program or the last delta Release of the modules.

Package Release : To provide longer periods of stability for the live environment by reducing the frequency of Release, it is recommended that , where appropriate and where the resulting larger amount of Change can be confidently handled without problems, individual Releases (full units, delta releases or both) are grouped together to form 'package Releases'. For example, Changes to one system or suite will often require Changes to be made to others. If all these Changes have to be made at the same time, they should be included in the same package Release.

A package can, for example, contain an initial version of a new TP service, several new versions of batch programs, a number of new and initial versions of individual modules, together with the Release of a complete new desktop system (both hardware and software). Both full and delta Releases may be included.

4. The DSL forms part of the Release policy or Change and Configuration management plan for the organization. The definition should include: (6 points)

- n Medium, physical location, hardware and software to be used, if kept online (a DSL can simply be a secure tape library, if properly controlled and catalogued) – some configuration Management support tools incorporate software libraries, which can be regarded as a logical part of a DSL
- n Naming conventions for file store areas and physical media
- n Environments supported, e.g. test and live environments
- n Security arrangements for submitting Changes and issuing software, plus backup and recovery procedures
- n The scope of the DSL: e.g. source code, object code from controlled builds and associated documentation
- n Retention period for old Releases of software
- n Capacity plans for the DSL and procedures for monitoring growth in size
- n Audit procedures
- n Procedures to ensure that the DSL is protected from erroneous or unauthorized Change (e.g. entry and exit criteria for items.)

5. List 5 benefits of the Release Management process (5 points)

- n a greater success rate in the Release of hardware and software and therefore an improved quality of service delivered to the business
- n consistency in the Release processes of the hardware platforms or software environments
- n minimization of the disruption of the service to the business through synchronization of Releases within packages involving hardware and software components from different platforms and environments
- n assurance that the hardware and software in live use is of good (or known) quality, because the Release are built properly, from hardware and software components that have been subject to quality control and effective testing ,and have been constructed under Change Management.
- n Stable test and live environments, because Changes are normally combined into Releases and so there should be fewer Individual implementations
- n Better use of User resources because of combined efforts when testing new Releases – this also means that it will be easier to justify the cost of system – wide regression testing
- n Minimization of regression-testing requirements, offering greater coverage than is possible with small Changes that occur frequently or too close together

6. List 5 KPI (Key Performance Indicators) for the Release Management Process (5 points) (5 points)

- n Release built and implemented on schedule, and within budgeted resources (but care should be taken to isolate any problems that are outside the control or responsibility of Release Management, such as application development delays)
- n Very low (ideally no) incidence of Releases having to be backed out due to unacceptable errors (note however that software Releases need out be entirely error – free ; a decision can be made to go ahead with a Release despite the presence of errors, provided that they are of a minor nature, and within the permitted fault tolerances
- n Low incidence of build failures
- n Secure and accurate management of the DSL
- n No evidence of software in the DSL that has not passed quality checks and no evidence of reworks on any software that was extracted form the DSL
- n DSL sizing matching the demand for space, and timely and accurate housekeeping of the DSL
- n Compliance with all legal restrictions relating to bought-in software

7. Describe the relationship between Release Management and Change Management. (2 points)

The CAB, as defined in the Change management process, with advice form Release Management, is responsible for recommending the content and scheduling of Releases. Release Management is then responsible for implementing the agreed Releases. Release Management is normally represented on the CAB and is involved in establishing the organization's Release policy.

Although Release Management oversees the details of the roll out of a Change, it is under the

control and authority of Change Management.

8. In the activity of Planning a Release, list and describe 4 items that need to be considered. (8 points)

- n Gaining consensus on the Release contents
- n Agreeing to the phasing over time and by geographical location, business unit and Customers
- n Producing a high – level Release schedule
- n Conducting site surveys to assess existing hardware and software in use
- n Planning resource levels (including staff overtime)
- n Agreeing on roles and responsibilities
- n Obtaining detailed quotes and negotiating with suppliers for new hardware, software or installation services
- n Producing back – out plans
- n Developing a quality plan for the Release
- n Planning acceptance of support groups and the Customer

It Service Manager MASTERS Program

Service Delivery Quick Quiz

ASSESSMENT

Provide your answers underneath each question

1. Financial Management

Name the three activities of Financial Management . which activity helps influence the customers and users use of IT Service (and why) ?

Answers:

- 1) Budgeting
- 2) IT Accounting
- 3) Charging

Charging is the activity that will influence behavior.

2. Availability Management

- (a) what is the goal of availability management?
- (b) What are the abilities that are discussed in Availability Management?

Answers:

- a) Goal: Availability Management is to optimize the capability of the IT Infrastructure services and supporting organization to deliver a Cost effective and sustained level of Availability that enables the business to satisfy its business objectives.
- b) Abilities
 - Availability: optimal availability of IT service provision
 - Reliability: reliability of an IT service and individual components
 - Serviceability: External contracts on (preventive) maintenance support and recovery of components
 - Maintainability/Recoverability: Internal contracts on (provenance) maintenance support and recovery of components

3. Capacity Management

- (a) Name the three sub-processes for Capacity Management
- (b) Name at 4 of the 6 activities for Capacity Management.

Answers:

- a) 3 sub-processes

IT Service Manager MASTERS Program

Service Delivery Quick Quiz

ASSESSMENT

- Business capacity management: this sub- process is responsible for ensuring that the future business requirements for IT services are Considered planned and implemented in a timely fashion
- Service capacity management: the focus of this sub-process is the management of the performance of the live operational IT services used by the customers.
- Resource capacity management: the focus in this sub process is the management of the individual components of the IT Infrastructure.

2) 4 activities of the 6

- Iterative activities (Monitoring Analysis Tuning Implementation)
- Demand Management
- Modeling
- Application sizing
- Storage of Capacity Management data
- Production of the Capacity Plan

4. IT Service Continuity Management

Name the four stages of IT Service Continuity Management? At which stage does the Risk Assessment occur?

Answers:

1) Initiation

- define policy scope
- establish project organization

2) Requirements & Strategy

- business Impact analysis
- Risk assessment
- Business Continuity strategy

3) Implementation

4) Operational Management

- Risk Assessment occurs in Requirements & Strategy stage

5. Service Level Management

(a) Name three types of agreements covered under the SLM process

(b) Which two processes contribute to identifying that a Service Improvement Program (SIP) is required and why?

IT Service Manager MASTERS Program

Service Delivery Quick Quiz

ASSESSMENT

Answers:

- a) 3 types of agreements
 - Service level agreement: the written agreement between the provider and user of the IT services
 - Operational level agreement: a written agreement with another internal IT department
 - Underpinning Contract : a written agreement with an external IT supplier
- b) problem and Availability management

IT Service Manager MASTERS Program

Service Support Quick Quiz

ASSESSMENT

Provide your answers underneath each question

1. Incident Management

Name three of the six activities of Incident Management. Apart from people what is another major source of where incidents are generated?

Answers:

- 1) Incident detection and recording
- 2) Classification and Initial support
- 3) Investigation and diagnosis
- 4) Resolution and recovery
- 5) Incident closure
- 6) Ownership Monitoring Tracking and Communication

System generated incidents.

2. Problem Management

- (a) what is the goal of Problem management?
- (b) What are three metrics for measuring Problem Management?

Answers:

- a) Goal: The goal of Problem Management is to minimize the adverse impact of Incidents and Problems on the business that are caused by errors within the IT Infrastructure and to prevent recurrence of Incidents related to these errors. In order to achieve this goal Problem Management seeks to get to the root cause of Incidents and then initiate actions to improve or correct the situation.
- b) Metrics
 - Number of RFCs raised
 - Amount of time spent working on problems
 - Ratio of reactive to proactive effort
 - Number of incidents occurring before a problem or known error are confirmed.

3. Configuration Management

- (a) Describe the relationship between Configuration Management and Change Management.

IT Service Manager MASTERS Program

Service Support Quick Quiz

ASSESSMENT

- (b) What is the name of the activity responsible for ensuring that the information recorded in the CMDB is representative of the real life

Answers:

- a) Change Management requests and Configuration Management provides details regarding to a CI that has a proposed change raised.
- b) Verification and Audit

4. Change Management

What is the name of the group that meets to give advice to the Change Manager regarding proposed changes? Name at least 4 items of infrastructure that could be controlled by Change Management.

Answers

- a) CAB
- b) Hardware Software Documentation Telecommunication facilities training courses Management procedures Tactical plans environmental infrastructure.

Release Management

Name the three types of releases and briefly explain one.

Answer:

3 types of Releases

- Major Software Releases and Hardware Upgrades
- Minor Software Releases and hardware Upgrades
- Emergency software and hardware fixes

5. Service Desk

What is the Objective of the Service Desk?

Answer:

- To provide a single point of contact for customers
- To facilitate the restoration of normal operational service with Minimal business impact on the customer within agreed service Levels and business priorities .