# IT Service Management

1. What is the basic characteristic of service (list at least 3 of them).

Sluzba = platba za výkon

- # Nehmotný výstup, těžko kvantifikovatelný a měřitelný
- # Neskladovatelná
- # Nedostatečně mobilní
- # Spotřeba probíhá současně s dodávkou
- # Zákazník je "on-line" přítomen produkci
- # Zákazník je často "spolutvůrce, spoludodavatel"
- # Složitě specifikovatelná

## 2. Social engineering is:

- The science of social behavior university students.
- The science of measurable parameters of Sociology.
- \* The method of spying sensitive information from users.
- The method of teaching IT specialist.

## 3. Outsourcing is:

- \* Contract that moves responsibilities about certain functional area to external resources
- \* Delegation of some activities to specialized organization
- \* Subject is hadovering all responsibilities about some business activity to external resource
- Hiring of programmers in India

## 4. Authentication is:

- Verification of authorized person
- \* Verification of user identity
- It's a term equal to Authorization
- It's authorization of unidentified person

# 5. Once the security incident occurred, it's correct to:

- \* Create a record containing all information regarding the incident
- Immediately contact persons or companies suspected of causing the incident
- Return attack the attacker (the System)
- Immediately clean and restore the system and bring it back to operational status.

#### 6. RAID 1 is:

- Risk Access ID, prioritize access number 1 in the case of risk situations
- Technology using the block-level stripping
- \* Technology using mirroring
- Technology using parity disk

#### 7. NAS is:

- \* Network Attached Storage
- More advanced technology SAN
- The operating system used by Cisco routers
- Device for asynchronous hardware encryption

8. List at least three types of potential attacks on computer systems. One of the selected type of attack describe in detail:

DoS attack - technika útoku na internetové služby nebo stránky, při níž dochází k přehlcení požadavky a pádu nebo minimálně nefunkčnosti a nedostupnosti pro ostatní uživatele.

Cíle takového útoku jsou v zásadě dva:

- Vnucení opakovaného resetu cílového počítače
- Narušení komunikace mezi serverem a obětí tak, aby jejich komunikace byla buď zcela nemožná, nebo alespoň velmi pomalá.

Socialni inzenyrstvi a lidska chyba Backdoors Exploits

- 9. Transaction is:
- \* The smallest unit of work
- \* Atomic
- \* Consistent
- \* Isolated
- 10. What is a cluster and what types we know:

je seskupení volně vázaných počítačů, které spolu úzce spolupracují, takže navenek mohou pracovat jako jeden počítač

High-availability clusters (vysoce dostupne clustery)

 Používá se pro zajištění nepřetržité služby bez ohledu na možné problémy jež postihnou jednotlivé zdroje.

Load Balancing (rozložene zatěže)

Používá se pro rozložení zátěže mezi více uzlů

Computational clusters (vypočetni clustery)

- Používá se pro získání vysokého výpočetního výkonu
- Cluster na úrovni aplikace
- Speciální aplikace schopná řídit distribuci a komunikaci jednotlivých úloh.
- Cluster na úrovni operačního systému
- Nejvhodnější rozmístění po uzlech zařídí OS.
- 11. Which activities are not a part of Asset Management
- Inventory reconciliations
- ? SW licenci management
- \* Server monitoring
- Stock Management
- 12. What kind of questions would you ask in case you get a call from customer that his/her network does not work?
- 13. ???? Main tools used for process revalidation (not only) in CF/AM are:
- Customer audit
- Internal audit
- Metrics defined in processes
- SLA- Service Level Agreement
- 14. Describe the hardware needed to implement Mainframe solution

UPS, power generator, air conditioning, gas fire extinguishing system, alarm system, security locks, CCTV (Closed-circuit television) and constant monitoring of environment conditions.

- 15. What are the basic communication channels for Helpdesk?
- \* Call
- \* Email
- \* WEB tool
- \* Chat
- 16. Specify at least 3 basic KPIs for Helpdesk

ASA (Average Speed Of Answer), CSAT (Customer Satisfaction),

ABANDONMENT RATE: The Abandonment Rate measures the percentage of calls, where the customer hangs up before he/she reaches a Customer Service representative. Customers handing up is usually indicative of long wait times. Typical Abandonment rates are 2%, 5%, 10%. It is very rare to see Abandonment Rate targets that are higher than this.

SERVICE LEVEL: The Service Level is usually closely linked to the ASA as this measures the percentage of all calls that are answered within the defined

ASA. If the Service Level is listed as 90%, this means that 90% of all call need to be answered within the ASA target [10, 30, 60 etc.]

- 17. What kind of tools are necessary of supporting the Helpdesk activities? Specify only the basic categories:
- Staffing
- Telephony
- Call Handling
- Knowledge Basis
- Reporting
- 18. What are the main activities of CSO:
- \* Service Management
- Monitoring
- \* Reporting
- Stock Management
- 19. In two sentences, what key function does Service Management drive, that is key to a successful relationship with a client?
- 20. What is overall business value of a strong Service Management team?
- 21. In your view what skills are required to work in such an organization (SM).
- 22. Main processes used (not only) in CSO are:
- \* Problem Management
- \* Change Management
- \* Availability Management

- Major Incident Management
- 23. Brief description how to setup processes of IT organization (based ob ITIL)
- Stanovenícílů, vstupů, výstupů aaktivitkaždéhoprocesů

Stanovenírolíajejichodpovědnostívdanémprocesu

ZpůsobměřeníkvalityposkytovanýchlTslužebaúčinnostilTSM –

Vzájemnávazbameziprocesy – Postupyaudituazásadyreportinguzakaždýproces

#### 24. ITIL is not:

- De-facto internationally recognized standard
- Customer oriented
- Platform independent
- \* EU legal standard

# 25. What id not a process in ITIL?

- Problem Management
- Capacity Management
- \* Helpdesk
- Financial Management for IT Services
- 26. IDC is the essence of standardization of services and technologies supplied by the defined competencies located at a centralized location. Briefly characterize the nature of the standardization and centralization, and indicate what are expected results of their application.

Výhody IDC

- poskytování servisu z malého počtu fyzických míst
- kombinace prací z několika oblastí jako jsou například správa serverů a sítí, call centra, servis management (problem a change management) a reportování
- jsou řízeny jako jedna entita
- zvyšují kvalitu servisu standardizací, automatizací a konsolidací
- 27. ???Which of the below are types possible of Cloud Deployment models:
- Private cloud
- Public cloud
- Hybrid cloud
- All the above
- 28. Which characteristic does not correspond to Cloud:
- On demand Self service
- Flexible Price pay as you consume
- Dedicated resources no resource pooling
- Rapid Elasticity
- 29. What is the role CMDB (Configuration Management DB)?
- 30. Soa is:

## SOA je

Service Oriented Architecture

Architektonický koncept založený na volně vázaných, obchodně zaměřených, sdílených a opakovaně použitelných službách (modulech) Definuje základní pravidla jak navrhovat distribuované systémy

Komunilace mezi službami je typicky asynchronní

- 31. Pouzivane nastroje kontroly procesu v OIS (Operation Infrastructure Services) jsou
- \* zakaznicky audit
- \* interni audit
- \* kontrolni meritka stanovena v procesech
- \* SLA (Service Level Agreement)
- 32. Jakym zpusobem se v soucasnosti mainframe chladi
- -forced air cooling
- -klimatizovane miestnosti, vodne chladenie
- 33. Vyhody mainframu proti ostatnim platformam
- \* spolehlive
- snadna konfigurace a udrzba
- TCO
- vse vyse uvedene
- 34. Hlavni oblasti vyuziti mainframe
- \* serverova virtualizace, hosting
- \* simulace realnych stavu, vyzkum
- \* aplikace pro masivni zpracovani transakci
- \* matematicke modelovani, vypocty v plovouci carce
- 35. Co nam zajisti ze ve WAN funguji procesy i v pripade stahovani velkeho objemu dat
- Eye of the storm
- \* QoS
- MPLS
- VPN
- 36. Pomoci jakych nastroju sledujeme vytizeni LAN/WAN
- Tacacs
- Cacti
- \* Eye of the Storm
- Radius
- 37. Vyrobci sitovych zarizeni
- \* IBM
- \* 3COM
- \* NOKIA

# \* CISCO

# 38. 3 vyhody u iSeries

LIC - Licenced Internal Code

Škálovatelnost

Spolehlivost

Otevřenost (možno provozovat Linux, Unix, Windows...)

Výkon on demand

Nativní podpora DB2, Javy

Particovatelnost

Clustering a HA

Security

# 39. SSO znamena

Server System Operation

- \* Monitoring a správa vzdálených systémů
- \* Proaktivní monitoring
- \* Správa dávkových operací, tisků, zálohovacích procesů

### 40. MAM se pouziva u

Message and Alert Management

- \* iSeries
- \* zSeries
- ...Series
- ...Series

Which of the following statements is INCORRECT?

The Service Owner:

A. Is responsible for the day-to-day monitoring and operation of the service they own

B. Is responsible for continual improvement and the management of change affecting the service they own

C. Is a primary stakeholder in all of the underlying IT processes which support the service they own

D. Is accountable for a specific service within an organization



Which of the following activities are helped by recording relationships between Configuration Items

(Cls)?

- 1. Assessing the impact and cause of Incidents and Problems
- 2. Assessing the impact of proposed Changes
- 3. Planning and designing a Change to an existing service
- 4. Planning a technology refresh or software upgrade
- A. 1 and 2 only
- B. All of the above
- C. 1, 2 and 4 only
- D. 1, 3 and 4 only

**Answer:** B



Which Service Design process makes the most use of data supplied by Demand Management?

- A. Service Catalogue Management
- B. Service Level Management
- C. IT Service Continuity Management
- D. Capacity Management



# Major Incidents require:

- A. Separate procedures
- B. Less urgency
- C. Longer timescales
- D. Less documentation



Which role or function is responsible for monitoring activities and events in the IT Infrastructure?

- A. Service Level Management
- B. IT Operations Management
- C. Capacity Management
- D. Incident Management

**Answer:** B



What are the three types of metrics that an organization should collect to support Continual Service

Improvement (CSI)?

- A. Return On Investment (ROI), Value On Investment (VOI), quality
- B. Strategic, tactical and operational
- C. Critical Success Factors (CSFs), Key Performance Indicators (KPIs), activities
- D. Technology, process and service



Which of the following is NOT a valid objective of Problem Management?

- A. To prevent Problems and their resultant Incidents
- B. To manage Problems throughout their lifecycle
- C. To restore service to a user
- D. To eliminate recurring Incidents



Availability Management is responsible for availability of the:

- A. Services and Components
- B. Services and Business Processes
- C. Components and Business Processes
- D. Services, Components and Business Processes



Who owns the specific costs and risks associated with providing a service?

- A. The Service Provider
- B. The Service Level Manager
- C. The Customer
- D. The Finance department



Which of the following are types of communication you could expect the functions within Service Operation to perform?

- 1. Communication between Data Centre shifts
- 2. Communication related to changes
- 3. Performance reporting
- 4. Routine operational communication
- A. 1 only
- B. 2 and 3 only
- C. 1, 2 and 4 only
- D. All of the above



How many people should be accountable for a process as defined in the RACI model?

- A. As many as necessary to complete the activity
- B. Only one the process owner
- C. Two the process owner and the process enactor
- D. Only one the process architect

Answer: B



What guidance does ITIL give on the frequency of production of service reporting?

A. Service reporting intervals must be defined and agreed with the customers

B. Reporting intervals should be set by the Service Provider

C. Reports should be produced weekly

D. Service reporting intervals must be the same for all services



Which of the following is the BEST definition of the term Service Management?

A. A set of specialised organizational capabilities for providing value to customers in the form of services

B. A group of interacting, interrelated, or independent components that form a unified whole, operating together for a common purpose

C. The management of functions within an organization to perform certain activities

D. Units of organizations with roles to perform certain activities



Which of the following is NOT a characteristic of a process?

- A. It is measurable
- B. Delivers specific results
- C. Responds to specific events
- D. A method of structuring an organization



Which of the following would be defined as part of every process?

- 1. Roles
- 2. Activities
- 3. Functions
- 4. Responsibilities
- A. 1 and 3 only
- B. All of the above
- C. 2 and 4 only
- D. 1, 2 and 4 only



Which of the following statements is CORRECT for every process?

- 1. It delivers its primary results to a customer or stakeholder
- 2. It defines activities that are executed by a single function
- A. Both of the above
- B. 1 only
- C. Neither of the above
- D. 2 only

**Answer:** B



What is the BEST description of the purpose of Service Operation?

- A. To decide how IT will engage with suppliers during the Service Management Lifecycle
- B. To proactively prevent all outages to IT Services
- C. To design and build processes that will meet business needs
- D. To deliver and manage IT Services at agreed levels to business users and customers



Which of the following is the CORRECT definition of a Release Unit?

- A. A measurement of cost
- B. A function described within Service Transition
- C. The team of people responsible for implementing a release
- D. The portion of a service or IT infrastructure that is normally released together



Which of the following do Service Metrics measure?

- A. Processes and functions
- B. Maturity and cost
- C. The end to end service
- D. Infrastructure availability



What is the BEST description of a Major Incident?

A. An Incident that is so complex that it requires root cause analysis before a workaround can be found

B. An Incident which requires a large number of people to resolve

C. An Incident logged by a senior manager

D. An Incident which has a high priority or high impact on the business



Event Management, Problem Management, Access Management and Request Fulfilment are part of which stage of the Service Lifecycle?

- A. Service Strategy
- B. Service Transition
- C. Service Operation
- D. Continual Service Improvement



Which Functions are included in IT Operations Management?

- A. Network Management and Application Management
- B. Technical Management and Change Management
- C. IT Operations Control and Facilities Management
- D. Facilities Management and Release Management



What is the Service Pipeline?

A. All services that are at a conceptual or development stage

B. All services except those that have been retired

C. All services that are contained within the Service Level Agreement (SLA)

D. All complex multi-user services



Defining the processes needed to operate a new service is part of:

- A. Service Design: Design the processes
- B. Service Strategy: Develop the offerings
- C. Service Transition: Plan and prepare for deployment
- D. Service Operation: IT Operations Management



Which of these are objectives of Service Level Management

- 1: Defining, documenting and agreeing the level of IT Services to be provided
- 2: Monitoring, measuring and reporting the actual level of services provided
- 3: Monitoring and improving customer satisfaction
- 4: Identifying possible future markets that the Service Provider could operate in
- A. 1, 2 and 3 only
- B. 1 and 2 only
- C. 1, 2 and 4 only
- D. All of the above



Which process is responsible for managing relationships with vendors?

- A. Change Management
- B. Service Portfolio Management
- C. Supplier Management
- D. Continual Service Improvement



Data used to support the capacity management process should be stored in:

- A. A configuration management database (CMDB)
- B. A capacity database (CDB)
- C. A configuration management system (CMS)
- D. A capacity management information system (CMIS)



Who is responsible for defining Key Performance Indicators (KPIs) for Change Management?

- A. The Change Management Process Owner
- B. The Change Advisory Board (CAB)
- C. The Service Owner
- D. The Continual Service Improvement Manager



Which statement about Service Level Agreements(SLAs) is CORRECT?

- A. They must contain legal wording because of their importance
- B. There should always be a separate SLA for each specific customer
- C. The wording must be clear and concise to allow no room for ambiguity
- D. Changes to the SLA can only be requested by the customer



Which of the following is NOT a Service Desk type recognised in the Service Operation volume of

ITIL?

- A. Local
- B. Centralised
- C. Holistic
- D. Virtual



# Match the following activities with the Deming Cycle stages

- 1. Monitor, Measure and Review
- 2. Continual Improvement
- 3. Implement Initiatives
- 4. Plan for Improvement
- A. 1 Plan, 2 Do, 3 Check, 4 Act
- B. 3 Plan, 2 Do, 4 Check, 1 Act
- C. 4 Plan, 3 Do, 1 Check, 2 Act
- D. 2 Plan, 3 Do, 4 Check, 1 Act

