

# IBM

## Exam C2160-667

### IBM Test 667, Architectural Design of SOA Solutions

Version: 6.0

[ Total Questions: 105 ]

**Question No : 1**

A retail catalog company's printing and mailing expenses are growing much more rapidly than revenue. Each time they update their database, they ship more catalogs and customers call in with more corrections.

Which evaluation and recommendation should the SOA Designer make?

- A.** Data quality is low. Master data management should be installed to cleanse and maintain data quality both from data sources and updates from the call center.
- B.** Third party mail lists are inconsistent. Use process modeling to identify when multiple records are created and how multiple catalogs get printed. Then use process simulation to optimize new processes.
- C.** Processes do not incorporate data cleansing. Create an information service that retrieves similar records and displays them in a portlet, so operators can see multiple records and work with the customer to eliminate them.
- D.** Data entry is a very common source of error and customers are often inconsistent as well. Operator generated updates should be re-implemented to the indirect exposure solution pattern to separate data entry from record update permitting a data cleansing step in the update processes.

**Answer: A**

**Question No : 2**

A company wants to integrate a number of existing best-of-breed applications by implementing service facades and an Enterprise Service Bus (ESB). The initial scenario involves the transfer of order information between a number of these backend services depending on business rules. An SOA Designer is asked to capture the functional requirements.

What is the most appropriate starting point?

- A.** Analysis of the information requirements of the existing applications
- B.** Investigation into appropriate industry standards for transferring data
- C.** Creation of use cases to understand what the services may be and how they interact
- D.** Define the component model associated with the existing applications and specify the service interfaces

**Answer: C**

**Question No : 3**

A government agency wants to ensure the selected patterns and code standards set down by their SOA governance body are adhered to.

Which type of tool will support this?

- A. Code generation
- B. Parsing
- C. UML modeling
- D. Data modeling

**Answer: A**

**Question No : 4**

A company has an existing message-based middleware solution that allows exchanging business information among several applications using a topic-based publish-subscribe integration pattern. As part of its SOA strategy, the company is now embarking on service-enabling the applications and wants to employ the publish-subscribe pattern using Web services technology.

Which Web services specification best addresses this need?

- A. WS-Federation
- B. WS-Addressing
- C. WS-Notification
- D. WS-MetaDataExchange

**Answer: C**

**Question No : 5**

Why is it necessary to enforce policies and monitor services within SOA Services Management?

- A. To insure data integrity and correlate business processes
- B. To trace transactions and diagnose problems

- C. To collect key performance metrics
- D. To ensure service availability

**Answer: D**

**Question No : 6**

What is the next step while architecting an SOA solution after documenting the business processes?

- A. Determine the operations required to realize each process.
- B. Select a business steward for each process and instruct the steward to identify re-usable services.
- C. Identify the services needed to realize each business process and group them into logical components.
- D. Identify core and non-core business components.

**Answer: C**

**Question No : 7**

The SOA reference architecture identifies core services including Interaction, Process, Information, Partner, Access, and Infrastructure.

What is one valid reason for excluding one or more of these services in an SOA?

- A. The application is predominantly middleware in nature, eliminating the need for presentation services.
- B. The consumer and the provider belong to different companies.
- C. The business sponsor has set budget constraints on solution architecture and the architectural components to be included have to be prioritized.
- D. The customer's internal politics make the specification too difficult.

**Answer: A**

**Question No : 8**

A team is evaluating the maturity of a customer's solution architecture relative to the IBM SOA Foundation. It is discovered that the customer has invested heavily in an internally-developed Enterprise Service Bus (ESB) and that their ESB has functionality expected to be found in other SOA Foundation services, especially Process Services, Business Services, and Information Services.

Which recommendation should be made?

- A. Continue development of the ESB because the architecture is generally compliant with the SOA Foundation.
- B. Stop development of the ESB because the architecture violates the principle of loose coupling among services.
- C. Continue using the ESB but begin a transition to a vendor-supported, standards-compliant ESB.
- D. Modify development priorities to shift Process Services functionality to other parts of the Solution Architecture.

**Answer: C**

#### Question No : 9

A midsize city is experiencing rapid growth that requires extensive changes in city land use regulations. Under this pressure, many land use disputes are getting caught in endless inter-departmental exchanges to complete data collection using a variety of completion criteria. This is angering both citizens and land developers.

Which approach to SOA is likely to have the greatest impact?

- A. Apply governance policies and procedures to control inter-departmental exchanges.
- B. Align the departments with a common end-to-end process with shared business services.
- C. Align the departments with a common data model and data access services to avoid confusion and duplication.
- D. Create citizens portals to provide a mechanism for citizens to more easily monitor and manage their role in the process.

**Answer: B**

#### Question No : 10

A large airline has decided to use SOA as a means to reduce costs through the use of an Enterprise Service Bus (ESB)based infrastructure. The IT strategy group has purchased sophisticated messaging middleware and prototyped some services related to accessing passenger information. The airline needs to decide what to do next.

Which recommendation should be made?

- A.** Move the prototype to production to assess the impact on the enterprise architecture.
- B.** Identify a governance method to define policies and procedures for sharing the ESB infrastructure.
- C.** Align an SOA project with a business initiative and select high-value services through process analysis.
- D.** Add a process server to the infrastructure to provide a means to use the passenger information services.

**Answer: C**

**Question No : 11**

A mortgage loan provider currently has legacy applications utilized by a network of branches and franchised agents. They want to expand by adding a new channel to allow independent mortgage brokers to submit mortgage loan applications. They realize they must provide a differentiating offering to the independent mortgage brokers to attract participants and grow the new channel.

How can SOA benefit their requirement?

- A.** By building an SOA with a secure connectivity layer, they could quickly enable the mortgage broker channel to use their applications without any changes to the legacy system.
- B.** They could reduce the cost to develop new applications needed for each independent broker by reusing services as integration code that is written for each broker's system to expedite development.
- C.** By service enabling the legacy applications and offering a Web-based portal for independent brokers, they can minimize the impact to existing channels, minimize changes to existing code, and quickly create an offering for the new channel.
- D.** By implementing security and governance as part of an SOA deployment, they can control access to the current system to determine which brokers are using the system and personalize their marketing to the high usage brokers.

**Answer: C**

**Question No : 12**

An engineering services company is being asked by its customersto provide solutions that cross Line of Business (LOB) areas. Each LOB is independent and is measured on its own profitability. The Chief Operating Officer plans to make some organizational changes.

How could SOA enable this business transformation?

- A.** Provide an abstraction layer for each LOB application that will allow flexible composition of services tailored to each LOB business model. Create an Enterprise Service Bus (ESB) that supports integration of systems across the LOBs for reuse.
- B.** Provideshared business services by migrating to a commercial Enterprise Resource Planning (ERP) system that can be service-enabled for access through an enterprise portal or from existing individual LOB applications.
- C.** Implement information as a service to consolidate data models and sharing across LOBs. Support governance of the service portfolio at an enterprise level.
- D.** Create an architecture board for each LOB to introduce SOA processes and drive service identification, goal modeling and business process re-engineering in support of mapping services to business capabilities.

**Answer: C**

**Question No : 13**

How can a designer most effectively integrate components developed in various technologies at different companies into a composite application within an SOA?

- A.** Through careful coordination to ensure compatible interfaces
- B.** Through the use of industry standards such as SOAP over HTTPS
- C.** By placing the components in a service repository which will mediate the differences in their interfaces
- D.** By providingcode mediation and transformation functions through a business process modeling effort

**Answer: B**

**Question No : 14**

A Fortune 100 company is migrating its Enterprise Application Integration (EAI) architecture to SOA. The intent is to begin exposing its capabilities to business partners. The CIO is thinking about building a high speed, custom messaging solution so there is capacity for future growth.

What should the SOA Designer say about the long-term implications of that direction?

- A.** A custom messaging solution could provide performance advantages if development priority is allocated to provide standards-based connectors and adapters for business partners to connect.
- B.** XML messages can be transformed at wire speed using Enterprise Service Bus (ESB) appliances like WebSphere DataPower SOA Appliance, so it is not necessary to be concerned with that part of the system's performance.
- C.** Total cost of ownership will increase with custom middleware. Open standards-based commercial messaging products are more interoperable, extensible, scalable, replaceable, and reliable than custom-built systems.
- D.** It will take a serious commitment to detailed technical support to make this happen. It is always a tradeoff between standards-based compliance and performance. The implementation of the custom messaging will need to provide serious performance advantages to business partners.

**Answer: C**

**Question No : 15**

The IBM SOA Foundation includes services that support business innovation and optimization.

What should be found in an SOA solution compliant with the SOA Foundation?

- A.** Automatic recognition of marketplace trends and dynamic reconfiguration of services in support
- B.** Business process simulation to predict the effect that process changes might have on the business
- C.** Alerts generated whenever business efficiency drops below a predefined threshold
- D.** An SOA dashboard for executives showing new business opportunities categorized by Return on Investment (ROI)

**Answer: B**

**Question No : 16**

A rapidly growing retail company recently outsourced their package delivery to a very reputable package delivery company. The two companies are integrated using SOA and Web services. However, the retail company is having customer satisfaction issues as the call center is not reliably calculating delivery dates.

Which portion of the SOA Foundation is the focus to resolve this issue?

- A. Information Services
- B. Process Services
- C. Partner Services
- D. Interaction Services

**Answer: C**

**Question No : 17**

A large multi-national bank is using SOA to transform their payment system to support new business models such as cross border treasury functions. The current system is a complex mix of payment types and rules used in each country, interacting with a variety of services to complete a payment.

Which portion of the SOA Foundation is central to the transformation of this system?

- A. Partner Services
- B. Process Services
- C. Interaction Services
- D. Information Services
- E. Access Services

**Answer: B**

**Question No : 18**

A large bank has a paper-based process for transferring funds between regional centers that takes days to complete. They want to use SOA to automate this process.

As an SOA Designer, what is a likely reason to also include Partner Services?

- A. The automated process needs to provide self service and status tracking of the process to its users.
- B. The funds transfer process involves service calls to an internal workflow that controls the final step.
- C. There is a requirement to use Extract/Transform/Load (ETL) to move information from one service to another.
- D. There is a business requirement to conform to interchange standards like Society for Worldwide Interbank Financial Telecommunication (SWIFT).

**Answer: D**

**Question No : 19**

Which statement about SOA service design is true?

- A. Statefulness is desirable as it implies that the service provider holds parameters in memory between invocations avoiding data communication costs.
- B. Loose coupling implies that services should be designed using standardized interfaces and open standards.
- C. Service granularity implies the service must have the smallest amount of functionality in the subsystem.
- D. Encapsulation implies that services should hide the implementation details from their interface design.

**Answer: D**

**Question No : 20**

Which statement is true when designing services within SOA guidelines?

- A. Loose coupling implies that a service design is open standards compliant.
- B. Stateless services must never invoke other services before responding to consumers.
- C. Encapsulation implies that service implementation details should not be exposed in the interface design.
- D. Service granularity implies that the function provided by a service is limited to the smallest possible scope.

**Answer: C**