Question 1

NO: 346

Scenario:

Please read this scenario prior to answering the question

Your role is that of a consultant to the Lead Enterprise Architect in a company that speicializes in luxury electric cars and their powertrain components, and also produces battery-charging equipment. It has its own distribution network, its own showrooms, and sells directly to customers via the internet. The company has four manufacturing facilities, two in the North America, one in Europe, and one in Asia.

A challenge that the company is facing to scale up the number of vehicles coming off the production line to meed customer demand, while maintaining quality. At the moment there are supply chain storages for key electronic components related to the autonomous drive system. In response the this, the research arm of the company has pioneered the development of a new self-driving platform. This new design uses common off-the-shelf components that will allow for a significant increase in overall vehicle production. This new design is ready to go into production.

The company has a mature Enterprise Architecture practice that is supported by a cross-functional Architecture Board. The TOGAF standard is used for developing the automated manufacturing process and systems used to design, manufacture and test the new design. The Chief Information Officer and the Chief Operating Officer co-sponsor the Enterprise Architecture program.

As part of putting the new self-driving platform into production, adjustments to the automated assembly processes need to be made. A pilot architecture project at a single location has defined an updated approach for controlling the automated test systems used to perform

final quality assurance. The Chief Engineer, sponsor of the activity, and the Architecture Board have approved the plan for immediate implementation at each plant.

Architecture Contracts have been developed that detail the work needed to implement and deploy the new automated test system controller for each location. The Chief Engineer has expressed concern that a uniform process be employed at each location to ensure consistency and quality.

Refer to the Scenario

The Lead Enterprise Architect has asked you to recommend the best approach to address the Chief Engineer's concern.

Based on the TOGAF standard, which of the following is the best answer?

Options:

A- You create an Architecture Contract to manage and govern the implementation and migration process. If the contract is issued to an external party, you ensure that it is a fully enforceable legal contract. For internal development projects, you decide it is adequate to utilize a memorandum of understanding between the Architecture Board and the implementation organization.You recommend that if a deviation from the Architecture Contract is detected, the Architecture Board grant a dispensation to allow the implementation organization the ability to customize the process to meet their local needs.

B- You use the Architecture Contracts to manage the architecture governance processes for the project across the locations. You deploy monitoring tools to assess the performance of each completed drive assembly at each location and develop change requirements if necessary.You recommend that if a deviation from the contract is detected, the Architecture Board should modify the Architecture Contract to allow the implementation organization the ability to customize the process to meet their local needs. As a result, you then issue a new Request for Architecture Work to implement the modified Architecture Definition.

C- You create an Architecture Contract to manage and govern the implementation and migration process at each location. For internal development projects, you issue a memorandum of understanding between the Architecture Board and the implementation organization. For contracts issued to an external party, you ensure that it is a fully enforceable legal contract.You ensure that the Architecture Board reviews all deviations from the Architecture Contract, and considers whether or not to grant a dispensation to allow the implementation organization to customize the process to meet their local needs.

D- You review the applicable Architecture Contract for each location, ensuring that it addresses the project objectives, effectiveness metrics, acceptance criteria, and risk management. In cases where the contract is issued to an external party, you ensure that it is a legally enforceable contract.You schedule compliance reviews at key points in the implementation process to ensure that the work is proceeding in accordance with the Architecture Definition. You ensure that the Architecture Board reviews all deviations from the Architecture Contract, and considers whether or not to grant a dispensation to allow the implementation organization to customize the process to meet their local needs.

Answer:

A

Question 2

Question Type: MultipleChoice

Scenario

Please read this scenario prior to answering the Question

Your role is that of Lead Enterprise Architect for a chain of convenience stores. The chain includes over 15,000 retail outlets throughout the Asia-Pacific region. Each store in the chain is an independently owned and operated franchise. The stores operate 24 hours a day and 7 days a week. Many of the stores have been with the franchise for more than 10 years and still use the original IT systems deployed at that time.

The CEO of the chain has stated his concerns about the inefficiencies of the current systems and identified the need to change. He has defined a new strategic vision that will enhance the business by providing its franchisees new services to help them compete with other retail outlets and online retailers. This strategy is part of the long-term commitment to enhance the brand image and increase revenue for the chain. He has also stated that he expects improved financial results by the end of the current fiscal year.

These changes will provide the chain with improved products, and more efficient operations. The stores will also act as delivery and return locations for a large online retailer which will further increase the number of potential customers. The addition of a corporate-wide data warehouse will provide analytics that will enable the marketing group to improve its ability to target advertising and new products to specific regions.

The chain has a mature Enterprise Architecture practice based in its headquarters and uses the TOGAF standard as the method and guiding framework. The CIO is the sponsor of the activity.

The Chief Architect engaged the services of a leading consulting firm that specializes in business strategy. An initial study has been conducted to identify the strategic changes needed to implement the CEO's vision. This recently completed with approval of a strategic architecture encompassing the entire chain, including detailed requirements and recommendations.

Based on the recommendations from the initial study, the decision for the chain to adopt a packaged suite of integrated applications that is tailored to the needs of the franchise has been taken.

Refer to the scenario

You have been asked by the Chief Architect to propose the best approach for architecture development to realize the CEO's vision.

Based on TOGAF, which of the following is the best answer?

Options:

A- You propose that the target architecture is defined first, followed by transition planning. This is because the vision is well understood and the strategic architecture agreed. The target first approach will ensure that the current problems and inefficiencies of the baseline architecture are not carried forward, and that the proposed solution addresses the requirements identified in the initial study.

B- You propose that this engagement define the baseline architecture first in order to assess the current infrastructure capacity and capability. The initial priority is to understand the proble,. Then the focus should be on transition planning and architecture deployment. This will identify requirements to ensure that the projects are sequenced in an optimal fashion so as to realize the vision.

C- You propose that the team focus on architecture definition, with a specific emphasis on understanding the strategic change parameters of the business strategy. Once understood, the team will be in the best position to identify the requirements, drivers, issues, and constraints for this engagement. You would ensure that the target architecture addresses non-functional requirements so as to ensure the target architecture is robust and secure.

D- You propose that the team focus on defining the target architecture by going through the architecture definition phases (B-D). This is because the initial study identified the need to change. This will ensure that the change can be defined in a structured manner and address the requirements needed to realize the vision.

Answer:

A

Question 3

Scenario

Please read this scenario prior to answering the Question

You are working as a consultant to the Chief Architect at an intelligence and security organization responsible for securing government communications and information systems. These provide real-time, highly secure communication of voice, video, and message data to remote locations around the world. The agency has recently received information from intelligence sources that the current encryption protocols may no longer be secure. In response, a program is underway to upgrade the systems.

The agency has an established Enterprise Architecture (EA) capability based on the TOGAF standard. The Executive Director of the agency is the sponsor of the EA capability.

Since reliable, high-performance, and secure communications are essential to preserving national security, the Executive Director has placed more stringent requirements for the architecture of the upgraded systems. It must be able to provide assurance and verification of specific performance measures on the key services that are most crucial for system operation. Focusing on these service-level details and specific measurements, will allow stricter requirements to be enforced in service contracts. It will also provide a high degree of assurance that necessary performance is being delivered and that notifications will occur if any critical service fails to perform as required.

A portion of the program budget has been allocated to context a review of the EA. The scope of the review is to evaluate the processes, content and governance of the EA capability to ensure that the higher target performance and service levels required by the upgraded system can be achieved.

The Chief Architect has noted that the core EA artifacts that have been in use are not able to describe these new capabilities. The artifacts do not have explicit provisions for defining the in-depth measurement requirements regarding specific services required for the system. She has learned that certain services within the current system have service measurement implementations that match some of the new requirements, but they are only used in a few areas.

Recent EA efforts at another national agency have produced generalized high-performance communication system models to realize similar requirements in a critical defense system involving secure communications. It is possible that these models may be useful for the upgrade program.

Refer to the Scenario

[Note: You may need to refer to the Content Metamodel chapter, section 30.4 (located in Part IV) of the reference text in order to answer this question.]

You have been asked to make recommendations for tailoring the Architecture Content Metamodel to accommodate the requirements of the upgraded system.

Based on the TOGAF standard, which of the following is the best answer?

Options:

A- You recommend that a Communications Engineering view is created using the infrastructure consolidation extension from the Architecture Content Metamodel. This view will allow architects to align the needed performance measurement communications across the system. This will support the stringent performance measurements needed for the more detailed governance views required for the upgraded system, making the interfaces to the communication and network layer of the architecture highly visible at the application level.

B- You recommend that the services extension be incorporated into the Architecture Content Metamodel. By using this extension, the service model is no longer constrained by what is expected in typical business service definitions, allowing more flexibility for adding customized models to support the more stringent measurement requirements. The services extension can also be used to map terminology between the business services and the application components.

C- You recommend that the motivation and governance extension are incorporated into the Architecture Content Metamodel. Using these extensions will allow modeling the goals, objectives and drivers for the architecture, linking them to service levels and more detailed governance models. This will also enable the ability to re-use existing profiles, customizing them for the various service contracts involved.

D- You recommend all of the extensions be incorporated into the Architecture Content Metamodel. The full Content Metamodel will enable the EA team to capture and categorize all the important additional data needed to support the performance and measurement objectives linked to these artifacts. Once the new repository content has been implemented, on- demand queries can be used to generate a customized governance stakeholder view that isolates the artifacts and data needed to assess measurement for any particular service. If this view is found to be inadequate for the governance concerns, the service models within those artifacts can be expanded.

Answer:

B

Question 4

Question Type: **MultipleChoice**

Scenario

Please read this scenario prior to answering the Question

You are serving as an Enterprise Architect at a large aerospace company. It designs, manufactures and sells civil and military aviation products worldwide and manufactures in multiple countries both inside and outside of the European Union. The company has grown rapidly by acquisition and has inherited numerous different procurement processes and related IT systems.

Recently, several procurement processes, within the civil aviation business, have has problems related to the timing of purchases, which has led to excess inventory. The Vice President in charge of Supply Chain Management has made the decision to consolidate and reduce redundant procurement processes and systems. He has committed to the CEO that the business will move to a "Just-in-time" procurement system so as to keep inventory costs low.

The TOGAF standard is used for internal Enterprise Architecture activities. At present, there are no architectural assets in the Architecture Repository related to this initiative. All assets will need to be acquired, customized, or created from scratch. The company prefers to implement commercial off the shelf package applications with little customization. The CIO, who is the project sponsor, has stated that she is not concerned about preserving the existing procurement processes or systems.

This project is using an iterative approach for executing the Architecture Development Method (ADM). The architecture development project has completed the Architecture Vision Phase and has started a number of iteration cycles to develop the Architecture. As a packaged application is being considered, the next iteration will include both the Business and Application Architectures.

Stakeholders concerns that should be addressed by these architectures include:

1. What groups of people should be involved in procurement-related business processes?

2. What applications will these groups use once the architecture development is complete?

3. What non-procurement applications will need to be integrated with the new procurement applications?

4. What are the dependences between the non-procurement and the new procurement applications?

Refer to the Scenario

[Note: You may need to refer to the Architectural Artifacts chapter, section 31.6 (located in Part IV) within the reference text in order to answer this question.]

You have been asked to identify the most appropriate catalogs, matrices, and diagrams to support the next iteration of Architecture development.

Based on the TOGAF standard, which of the following is the best answer?

Options:

A- You would describe the Baseline Business Architecture with a Baseline Business Process catalog, and an Object lifecycle catalog. You would describe the Baseline Application Architecture with an Interface catalog and a Technology Portfolio catalog.

B- You would describe the Baseline Business Architecture with an Organization/Actor catalog, and a Business Service/Function catalog, and a Data Entity/Business Function matrix. You would describe the Baseline Application Architecture with an Application Portfolio catalog and an Application/Function matrix.

C- You would describe the Target Business Architecture with a Business Interaction matrix, and a Business Service/Function catalog. You would describe the Target Application Architecture with an Application Communication diagram, an Application/Organization matrix, an Application Interaction matrix and an Interface catalog.

D- You would describe the Target Business Architecture with a Business Service/Function catalog, an Organization/Actor catalog, and Data Lifecycle diagrams. You would describe the Target Application Architecture with Application Communication diagrams, an Application Interaction matrix, and an Application Portfolio catalog.

Answer:

D

Question 5

Question Type: MultipleChoice

Scenario

Please read this scenario prior to answering the Question

You are serving as the Lead Architect for an Enterprise Architecture project team within a multinational oil and gas corporation. It is organized into two major business groupings:

-Upstream operations which include exploration for crude oil and natural gas and operating the infrastructure necessary to deliver oil and gas to the market.

-Downstream operations which include the manufacturing, distribution and marketing activities for oil products and chemicals

Safety is a priority for the company, with the aim to ensure id causes zero harm to people and the environment. The company has to satisfy the regulatory requirements of each of the countries it operates in.

The downstream business generates a third of the company's profits worldwide and includes more than 30,000 petrol stations and various oil refineries. In some countries it also includes oil refining, a retail station network, lubricants manufacture and marketing, industrial fuel and lubricants sales. The practice for the downstream business has been to operate locally managed by local "operating companies".

The Governing Board is concerned about the risk posed by operating in this complex global environment with a large part of the downstream business represented by local operating companies. As a result, the Chief Executive Officer (CEO) has appointed a Chief Compliance Officer (CEO) to be responsible for overseeing and managing compliance issues for the corporation. The CCO reports directly to the CEO.

The CCO has approved the expenditure of resources to establish an Enterprise Architecture program, and has mandated the use of the TOGAF standard as the framework. He has requested to be informed about the status of downstream operations that could impact regulatory compliance. He also wants the corporate legal staff and auditors to analyze all proposed new downstream operations to ensure that they are within the legal guidelines for each country. In addition, the local operating companies should be able to see that the architecture is appropriate for their needs.

The architecture project team has worked within the sponsor to complete a detailed Request for Architecture Work providing the high level project description. As the project commences the next phase, the necessary approvals from corporate and line management have been .....

Refer to the Scenario

You have been asked to recommend an approach that would enable the development of an architecture that addresses the needs of the Chief Compliance Officer, legal staff, auditors and the local operating companies.

Based on the TOGAF standard, which of the following is the best answer?

Options:

A- You recommend that a set of models be created for each project architecture that can be used to ensure that the system will be compliant with the local regulations. A formal review should be held with the stakeholders to verify that their concerns have been properly addressed by the models.

B- You recommend that an analysis of the stakeholders is undertaken, including development of a Stakeholder Map. This will allow the architectures to define groups of stakeholders who have common concerns. The concerns and relevant viewpoints should be defined for each group of stakeholders, and recorded in the Architecture Vision document.

C- You recommend that the ArchiMate modeling language is used to create a set of models that can be applied uniformly across all architecture projects. Each architecture should then be defined based on this fixed set of models. All concerned parties can then examine the models to ensure that their needs have been addressed.

D- You recommend that a Communications Plan be created to address the powerful and influential stakeholders. This plan should include a report that summarizes the key features of the architecture with respect to each location and reflect the stakeholders' requirements. You will check with each stakeholder that their concerns are being addressed.

Answer:

B

Question 6

In which ADM phase is the Implementation and Migration Plan coordinated with other activities in the enterprise?

Options:

A- Phase A

B- Phase G

C- Phase E

D- Phase H

E- Phase F

Answer:

E

Explanation:

Reference https://pubs.opengroup.org/architecture/togaf91-doc/arch/chap14.html

Question 7

Which of the following describes an objective of the Preliminary Phase?

Options:

A- Ensure conformance requirements for the target architecture are defined

B- Develop the Implementation and Migration Plan

C- Operate the governance framework

D- Establish the architecture governance processes

E- Develop the Architecture Vision document

Answer:

D

Explanation:

Reference https://pubs.opengroup.org/architecture/togaf91-doc/arch/chap06.html