

Question: 1

Scenario: Rollins Manufacturing

Please read this scenario prior to answering the question

Rollins Manufacturing is a major supplier in the automotive industry, headquartered in Cleveland, Ohio with manufacturing plants in Chicago, Sao Paulo, Stuttgart, Yokohama, and Seoul. Each of these plants has been operating its own Manufacturing Requirements Planning (MRPII) system, production scheduling, and custom developed applications that drive the automated production equipment at each plant.

Rollins is implementing lean manufacturing principles to minimize waste and improve the efficiency of all of its production operations. During a recent exercise held for internal quality improvement, it was determined that a significant reduction in process waste could be achieved by replacing the current MRPII and scheduling systems with a common Enterprise Resource Planning (ERP) system located in the Cleveland data center. This central system would provide support to each of the plants replacing the functionality in the existing systems. It would also eliminate the need for full data centers at each of the plant facilities. A reduced number of IT staff could support the remaining applications. In some cases, a third-party contractor could provide those staff.

The Rollins Enterprise Architecture department has been operating for several years and has mature, well-developed architecture governance and development processes that are strongly based on TOGAF 9. At a recent meeting, the Architecture Review Board approved a Request for Architecture Work from the Chief Engineer of Global Manufacturing Operations who is the project sponsor. The request covered the initial architectural investigations and the development of a comprehensive architecture to plan the transformation.

The Common ERP Deployment architecture project team has now been formed, and the project team has been asked to develop an Architecture Vision that will achieve the desired outcomes and benefits. Some of the plant managers have expressed concern about the security and reliability of driving their MRPII and production scheduling from a central system located in Cleveland. The Chief Engineer wants to know how these concerns can be addressed.

Refer to the Rollins Manufacturing Scenario

You are serving as the Lead Enterprise Architect for the Common ERP Deployment architecture project. One of the earliest initiatives in the Enterprise Architecture program at Rollins was the definition of a set of IT principles and architecture principles that are well aligned with the overall enterprise principles. These now need to be updated to address the concerns raised.

You have been asked to select a set of principles most appropriate for guiding the team to define a robust solution.

[Note: You should assume that Rollins has adopted the example set of principles that are listed and defined in TOGAF 9, Section 23.6.]

Based on TOGAF 9, which of the following is the best answer?

- A. Common-use Applications, Data is Shared, Data is Accessible, Data is Secure, Interoperability, Control Technical Diversity.
- B. Business Continuity, Service-orientation, Data is Accessible, Data is Secure, Responsive Change Management.
- C. Maximize Benefit to the Enterprise, Business Continuity, Common-use Applications, Data is Shared, Data is Accessible, Data is Secure.
- D. Information Management is Everybody's Business, IT Responsibility, Data Trustee, Technology

Independence, Responsive Change Management.

Answer: C

Question: 2

Scenario: Global Mobile 1

Please read this scenario prior to answering the question

Global Mobile is a mobile telecommunications company formed through a series of mergers and acquisitions. They are yet to fully integrate the customer service systems for the most recent acquisitions, and as result, customer service has been a major concern for the Chief Technology Officer. Results for the last two quarters have shown that Average Revenue Per User (ARPU) and the customer retention (Churn) rate have fallen below the industry average. The Corporate Marketing group has published some new findings about customer satisfaction. The customers appear to be switching to Air Light, a competitor, because of superior customer service. Global Mobile actually has better coverage in nearly all markets than Air Light, and good roaming agreements that keep rates low for business travelers. But, customer satisfaction has remained low.

The Business Strategy group and the Enterprise Architecture group have conducted a high-level project to develop the enterprise-wide strategic plan. They have developed a business scenario which contains a good conceptual model of what needs to be done, and also identifies the key requirements. This was used in preparing the proposal presented to the Executive Council and the Corporate Board.

The planning for the program has been underway for several months. Global Mobile has selected TOGAF 9 as the basis for its Enterprise Architecture.

The Corporate Board has approved funding for a multi-million Euro conversion to transition to a packaged Customer Service System. It is anticipated that the overall program will take five years to complete, but there are some tactical projects that can commence immediately to address the situation. The Corporate Board has placed one additional major constraint on the program. In addition to achieving the business outcomes directly related to improving overall customer service within each business unit, the Corporate Board expects the Target Architecture to produce an additional saving of at least 30% over current operating costs through energy efficiency initiatives, virtualization of servers and workstations, and expanded telecommuting and desk-sharing. This Green initiative is intended to become a model for future investments at all company facilities worldwide.

Refer to Global Mobile scenario

You have been engaged as a consultant to advise the Chief Architect on the best ways to approach to the implementation planning activities for this significant business transformation.

Based on TOGAF 9, which of the following is the best answer? (Is this the right answers to choose?)

A. You recommend using conventional implementation planning techniques. The horizontal scope of the Green initiative would make the Capability-Based Planning approach used in the organization's TOGAFbased

Enterprise Architecture framework difficult to manage and govern. This approach to planning was better applied within the vertical scope of a business unit.

B. You recommend that the implementation planning activities be conducted using Capability-Based Planning. This is appropriate because the Green initiative is an enterprise-wide plan with a horizontal scope. Its metrics are aggregated at the enterprise level. It is crucial to gain business unit support and

cooperation to achieve the broader business outcomes which will benefit all.

C. The Capability-Based Planning approach used in the organization's TOGAF-based Enterprise Architecture framework is focused on business outcomes. The Green initiative is an infrastructure program that is technical in nature; therefore, it would not be appropriate to use the Capability-Based Planning approach. Instead, the Global Mobile systems development lifecycle approach should be utilized to develop the Solution Architecture.

D. You recommend using conventional implementation planning techniques. The Capability-Based Planning approach is normally only used in public sector, defense-related programs. This approach is not appropriate for a private sector company.

Answer: B

Question: 3

Scenario: AGEX Inc.

Please read this scenario prior to answering the question

AGEX is a large, global commodities trading company which has been growing rapidly through a series of acquisitions.

Each new business is performing well in its markets. However, the lack of integration between headquarters and the business units has increasingly caused problems in the handling of customer and financial information. The inability to share information across businesses has resulted in lost opportunities to "leverage the synergies" that had been intended when the businesses were acquired. At present, each business unit maintains its own applications. Despite an earlier initiative to install a common application to manage customer, products, supplier, and inventory information, each business unit has different ways of defining each of these core elements and has customized the common application to the point where the ability to exchange information is difficult, costly, and error-prone. As a result, AGEX has begun implementing a single Enterprise Resource Planning (ERP) system to consolidate information from several applications that exist across the lines of business. The Corporate Board is concerned that the new ERP system must be able to manage and safeguard customer information in a manner that meets or exceeds the legal requirements of the countries in which the company operates. This will be an increasingly important capability as the company expands its online services offered to clients and trading partners.

The CIO has formed an Enterprise Architecture department, and one of the primary goals in its charter is to coordinate efforts between the ERP implementation team and the business unit personnel who will be involved in the migration process. The CIO has also formed a cross-functional Architecture Review Board to oversee and govern the architecture.

After reviewing the available alternatives, and based on recommendations from the ERP vendor, AGEX has selected TOGAF 9 as the basis for its Enterprise Architecture program.

The CIO has endorsed this choice with the full support of top management.

Refer to the AGEX Inc. Scenario

You are serving as the Chief Architect.

You have been asked to recommend the approach to take in the Preliminary Phase to ensure that the Corporate Board's concern is addressed.

Based on TOGAF 9, which of the following is the best answer?

A. You evaluate the implications of the Board's concern in terms of regulatory and security policy

requirements. You then update the AGEX security policy to reflect the concern, ensuring that this policy is communicated across the organization. You allocate a security architecture team to ensure that security

considerations are included in ongoing architecture planning. You then assess the security implications and agreements within the AGEX businesses and their suppliers.

B. You evaluate the implications of the Board's concern in terms of regulatory requirements and their impact on business goals and objectives. Based on this understanding, you then issue a Request for Architecture Work to commence an architecture development project to develop a solution that will address the Board's concern. You allocate a security architect to oversee the implementation of the solution in the ERP system that is being developed.

C. You start by clarifying the intent that the Board has for raising this concern. This enables you to understand the implications of the concern in terms of regulatory requirements and the potential impact on current business goals and objectives. You propose that a security architect or security architecture team be allocated to develop comprehensive security architecture.

D. You evaluate the implications of the Board's concern by examining the potential impacts on business goals and objectives. Based on your understanding, you then update the current AGEX security policy to include an emphasis on the Board's concern. In addition, you allocate a security architect to ensure that security considerations are included in the architecture planning for all domains.

Answer: A

Question: 4

Scenario: Zephyr Enterprises

Please read this scenario prior to answering the question

Zephyr Enterprises specializes in the development of wind turbine blades for use in large-scale commercial wind energy production systems. Zephyr has manufacturing facilities located in Palm Springs, California, Omaha, Nebraska, and Winnipeg, Ontario. Each of these plants supplies a different manufacturer that builds and sells complete systems. The turbine blades are custom engineered to meet each manufacturer's design specifications.

Until recently, most turbine blades were fabricated manually using molded fiber-reinforced plastics.

However, recent improvements in composite materials, coupled with enhanced automated methods for precision application of materials during the molding process, have led to significant reduction in weight,

increase in strength, and greatly improved blade longevity. Zephyr has pioneered the development of a proprietary automated process for continuous extrusion of the turbine blades. Patents have been filed to protect the process, but certain trade secrets must be closely guarded.

Zephyr has a mature Enterprise Architecture organization that is supported by a cross-functional Architecture Review Board. The Chief Information Officer and the Chief Operating Officer co-sponsor the Enterprise Architecture program.

Zephyr has used TOGAF and its Architecture Development Method (ADM) to develop its automated manufacturing processes and systems that are used to design, manufacture, and test the blade assemblies. They have recently updated to TOGAF 9 and have adapted the Zephyr Enterprise Architecture to closely follow the TOGAF 9 framework. All of Zephyr's IT architects have been trained and certified on TOGAF 9. Recently, an architecture project was completed that defined a standard approach for controlling the Automated Test System that is used at each plant to perform final quality assurance

tests on each completed blade assembly. The Manufacturing Architecture Board approved the plan for immediate implementation at each plant.

An Architecture Contract was developed that detailed the work needed to implement and deploy the new Automated Test System controller. The Chief Engineer, sponsor of the activity, has expressed concern that a uniform process be employed at each site to ensure consistency.

Refer to the Zephyr Enterprises Scenario

You are the Lead Architect for this activity.

You have been asked to recommend the best approach to adopt to address the Chief Engineer's concern.

Based on TOGAF 9, which of the following is the best answer?

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 Manufacturing Architecture Board and the implementation organization. You

recommend that if a deviation from the contract is detected, the Manufacturing 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.

B. 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 Manufacturing Architecture Board and the implementation organization. You recommend that if a deviation from the Architecture Contract is detected, the Manufacturing Architecture Board grant a dispensation to allow the implementation organization the ability to customize the process to meet their local needs.

C. 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 Manufacturing Architecture Board and the implementation organization. You

ensure that the Manufacturing 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 create an Architecture Contract to govern the implementation and migration process at each site.

If the contract is issued to an external party, you ensure that it is a fully enforceable legal contract. You ensure that the contract addresses the project objectives, effectiveness metrics, acceptance criteria, and risk management. You then schedule compliance reviews at key points in the implementation process to ensure that the work is proceeding in accordance with the Architecture Definition. Based on the results, you ensure that the Manufacturing 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: D

Question: 5

Scenario: Vittronics Ltd.

Please read this scenario prior to answering the question

Vittronics Ltd. is a leading medical device manufacturer in the highly competitive market for Migraine Headache Pain Management (MHPM) devices. These tiny wireless devices are implanted in the brain and can deliver a precise electric shock when the wearable Pain Control Unit (PCU) detects an increase in stress induced by the onset of a migraine headache.

This technology will be a breakthrough in the treatment of this condition, and several competitors are striving to be the first to introduce a product into the market. However, all of them must demonstrate the effectiveness and safety of their products in a set of clinical trials that will satisfy the regulatory requirements of the countries in the target markets.

The Enterprise Architecture group at Vittronics has been engaged in an architecture development project to create a Secure Private Immersive Collaborative Environment (SPICE) that will allow researchers at its product development laboratories worldwide to share information about their independent clinical trials.

The Vittronics Enterprise Architecture group is a mature organization that has been utilizing TOGAF for several years. They have recently upgraded to TOGAF 9. The Vittronics Architecture Development Method (VADM) is strictly based on the TOGAF 9 Architecture Development Method (ADM) with extensions required to support current good manufacturing practices and good laboratory practices in their target markets.

The SPICE project team has now completed the Business, Information Systems, and Technology Architecture phases and has produced a complete set of deliverables for each phase. Due to the highly sensitive nature of the information that is managed in SPICE, special care was taken to ensure that each architecture domain included an examination of the security and privacy issues that are relevant for each domain. A corresponding SPICE Security Architecture has been defined.

The Executive Vice President for Clinical Research is the sponsor of the Enterprise Architecture activity. Refer to the Vittronics Ltd Scenario

You are serving as the Lead Architect for the SPICE project team.

As required by TOGAF, the SPICE project team recently completed a Business Transformation Readiness Assessment in Phase A (Architecture Vision). In that assessment, it was determined that there are risks associated with the adoption of the Immersive Collaborative Environment. Despite a clear expression of the vision and the business need for utilizing SPICE to accelerate the clinical trials, the researchers have been resisting the change because of concerns about safeguarding individually identifiable information about the subjects who were participating in the trials.

You have been asked to recommend how this situation be managed in the implementation planning phases.

Based on TOGAF 9, which of the following is the best answer?

A. You decide that in Phase E, the team creates an overall solutions strategy that can guide the Target Architecture implementation and structure the Transition Architectures. You check that there is consensus before proceeding.

B. You decide to return to Phase A, where the team should brainstorm a technical solution that mitigates the residual risks presented by the privacy issue. Then, during Phase D, you will direct the team to develop an Architecture Building Block to manage the security risks. After that, the team should

select Solution Building Blocks that mitigate all of the identified risks and revise the Requirements Impact

Statement to reflect the changes to the high-level solutions strategy and migration plan.

C. You decide that in Phase E, the team review the Business Transformation Readiness Assessment and identify, classify, and mitigate the risks associated with the identified readiness factors. If the risks can be satisfactorily mitigated, then you would continue to define a high-level solutions strategy that includes the Transition Architectures needed to make the change culturally and technically feasible.

D. You decide that in Phase E, the team determines an approach to implementing an overall strategic direction that will address and mitigate the risks identified.

Answer: C