

Advice/ Answers for Case Study

Many Exercises are open activities - have class justify decision. I tend to divide large classes into groups, give them wall space, then get them to post up their answers - class then goes for look see

In class discussions encourage quick/ short responses (Elevator Pitches), EA need to make quick pitches to C class Executives and many in the classroom have difficulty in this area.

EX1: Elevator Pitch

Class of 11 gave 20mins for this – broke into groups of 2 or 3

An ice breaking session to be performed early in course. Class should base this on pre-course. Restrict pitch to 30 secs

EX2: Architecture Landscape

Simplified this from the previous version. One aim of this is to have class read Case Study others are to continue getting them to team build and to present them with some easy wins.

Three projects presented first is horizontal (across whole enterprise) second is segment (Commercial Lifts Division) the last one is capability architecture

Sketching out is optional

EX3: Business Scenario

Views of environments and processes	Example artefacts Application/ Function Matrix P393 Data Entity/ Business Function Matrix P388 Application/ Data Matrix P389
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EX4: Handling Change

Individual exercise or set in groups about 10 mins followed by 10 min discussion

Situation	Response
The EA team is asked to include the provision of a centralised Compliance Management System into their project. This will cover all the areas sold into by the company detailing compliance with local regulations. The impact of the change is significant for the business strategy.	If the impact is significant for the business strategy, then there may be a need to redo the whole EA — thus a re-architecting approach.
In a separate initiative Challenge has decided to offer I-Pads to their staff instead of the traditional lap-top. Staff members who opt for the new technology will also need to access the ERP system. This extra functionality needs to be completed within the current budget	If a new technology or standards emerge, then there may be a need to refresh the Technology Architecture, but not the whole EA — thus an incremental change. No additional resources also pointer
The team has received a request from senior management to provide access to the ERP system on Android based devices and the Kindle. These devices are popular with many staff members who have purchased them privately (at their own expense) and want to use them for work functions. Senior Management is keen to promote the business use of personal devices and is	Security to be considered as well! Extra funding for this probably re-architect

willing to provide extra resources to enable this	
Because of improvements in computer architecture, the installation team suggest decreasing the size of the ERP host cluster from 8 to 6 servers. This will save money with no decrease in performance	If the change is at an infrastructure level — for example, ten systems reduced or changed to one system — this may not change the architecture above the physical layer, but it will change the Baseline Description of the Technology Architecture. This would be a simplification change handled via change management techniques.
A mistake has been discovered. It seems that the Baseline Architecture identified in phases B-D was not sufficiently rigorous. This is causing problems with the implementation	Prob partial re-architecting (Incremental) as Business Vision unchanged etc
In order to penetrate the North American market, Challenge has decided to merge with a US based rival. A new company is to be established and new working practices will be needed	The Business strategy has changed so method suggests re-architecting
Due to a change in regulations, the implementation of the new data-centre will require addition components. Guidelines for the new components will also be required	Substantial change is required to components and guidelines for use in deployment of the architecture could be re-arch or Incremental (partial re-architecting). New principles needed

Answers based on Open Group viewpoint - if re-architecting new Request For Work MUST be issued

EX5: Writing a Principle

Could use this as a group exercise but could also be given evening work if pushed for time.

EX6: Selecting Principles

B=5

A=3

D=1

C= Distracter

Asked to meet only TWO concerns: Security & Reliability NOT to redefine the complete list of principles needed.

THOSE THAT MEET

Data is accessible
Data security
Business Continuity

Data is Shared is a possible (manual says linked to the other Data principles) makes no different to the answers

B has 3 (or 4) correct

A has 2 (or 3) correct

D has only 1

C has zero (don't believe Inf Mgt is everybody's business meets stated needs)

EX7: Gap Analysis

Various answers gave about 20 mins do this on day 2 PM

Can do this L1 or L2

EX8: Going Forward

Aim: to have delegates appreciate the EA perspective

Can be used in the class (have them work in groups) to get them communicating or as evening work day one

Have them present as written bullet points then stick to classroom walls so that opinion can be shared. Suggested classroom time 15 mins. Interesting to see how different areas start building together – one class we linked mobile phones to health centres and fitness centres: it was possible to see future interlinkages evolving

EX9: Explaining a View

Suggest use as L1 after View/ Viewpoint discussion or L2 if subject not covered until AM day 3.

EX10: Managing Stakeholders

This consolidates the stakeholder tools useful as L2 exercise at end of stakeholder section This is a very subject exercise. If you wish a more 'objective exercise, Q4 Talk Is Cheap L2 question in section 4 can be done in addition to or instead of this exercise.

EX 11: Building Blocks

Various answers suggest L1

Exercise 12: Metamodel Extensions

Asked for three objectives:

1. Model process compliance
2. Model processes (that are event driven)
3. Model location of IT assets

A=5, Seems to do all three

Process Modelling: event driven processes & compliance

Infrastructure Consolidation: Location of IT assets

B=3, Does two of the three

Process Modelling: event driven processes & compliance

Gov extension not relevant

D=1, The Data & Services may provide a bit of clarity but do not focus on the concerns raised. The best you can say about this is it is a bit better than C

C=0, Think distracter. Neither Governance nor Motivation will help achieve objectives

ALL THESE IN THE SLIDES ALSO SECTION 34.4.1

The governance extension is intended to allow additional structured data to be held against objectives and business services, **supporting operational governance of the landscape**

Pete: I don't think that this extension is useful as we have NOT been asked to consider Op Governance as part of the solution. The document does say it should be used in large complex transformation type projects which the ERP project is however.

This extension should be used in the following situations:

- When an organization is considering IT change that will result in a significant impact to existing operational governance models
- When an organization has granular requirements for service levels that differ from service to service
- When an organization is looking to transform its operational governance practice

The process modeling extension is intended to allow detailed modeling of process flows by adding events, products, and controls to the metamodel. Typically, enterprise architecture does not drill into process flow, but in certain process-centric or event-centric organizations it may be necessary to elaborate process in a much more formal manner using this extension module.

The benefits of using this extension are as follows:

- This extension allows detailed process modeling and the cataloging of process artifacts.
- May be used to support **regulatory compliance activities**.
- May be used to re-purpose legacy or non-architectural process decomposition analysis.

Use process modelling extension:

- Where many technology products are in place with duplicate or overlapping capability
- Where many applications are in place with duplicate or overlapping functionality
- Where applications are geographically dispersed and the decision logic for determining the location of an application is not well understood
- When applications are going to be migrated into a consolidated platform
- When application features are going to be migrated into a consolidated application

The motivation extension is intended to allow additional structured modeling of the drivers, goals, and objectives that influence an organization to provide business services to its customers. This in turn allows more effective definition of service contracts and better measurement of business performance.

The benefits of using this extension are as follows:

- Highlights misalignment of priorities across the enterprise and how these intersect with shared services (e.g., some organizations may be attempting to reduce costs, while others are attempting to increase capability)
- Shows competing demands for business services in a more structured fashion, allowing compromise service levels to be defined

Ex 13: Value Chain Diagram

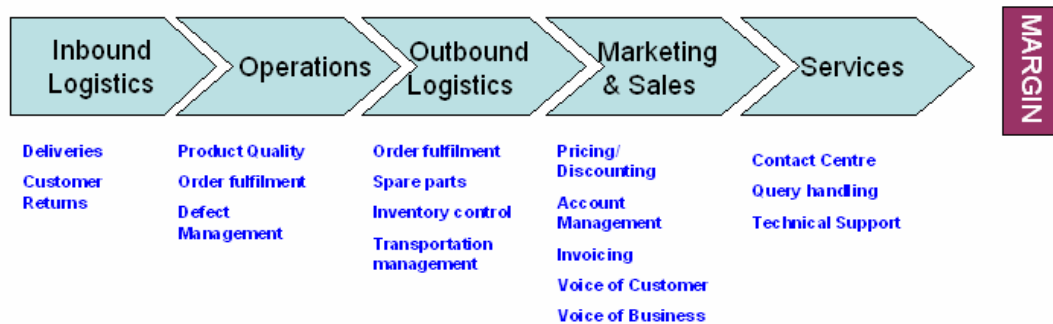
Give class 10 mins Group exercise. discuss about 10 mins

This is a practical activity

Additional info about VCD is in the technical notes section of the workbook.

Suggest perform in L2 after VCD slide

Answer



CLASS DISCUSSION : METAMODEL EXTENSIONS

1. **Motivation (p354)**
2. **Motivation (p354)**
3. **Infrastructure (p352)**
4. **Data (p350)**
5. **Process Modeling (p348)**

Taken from slide notes Open Group interpretation

EX14: Creating the vision

Starts class thinking about artefacts

EX15: Developing the Vision

CAN GIVE THIS AS HOMEWORK

Which phase are we in? Team just formed, Architecture Governance Board in place, asked to develop Arch Vision therefore most likely to be in Phase A

C: 5

Correct answer we need to develop a high level vision first, fix the scope and get requirements Section 7.4 (specifically 7.4.6). B Scenarios are the favoured technique here as this will allow is to determine what the business needs. This answer is the most comprehensive (compared to B) solution to meet the needs stated in the question

B 3

We need to understand the current functionality that is to be duplicated. Challenge operates a de-centralised IT support framework so the current baseline is probably vague. So it makes sense to baseline first however the stakeholders are worried about the new solution not meeting their needs so it is important to collect their requirements. Also B is describing Transition Architectures which are really a concern of Phase E we are in phase A. Despite this I think it is a bit better than A

A: 1 does not covered the baseline important here also is vendor instead of business focused. This is focussing on vendor aware products which is the focus of phase E not something that should really be a primary focus at the beginning of the cycle. Worth one mark as better than D

D: distracter : re written 30/8/12 we do not move directly to Implementation planning should conduct BTRA in Phase A first.

EX 16: Requirements

May have to explain functional & non-functional (refer to technical notes section of workbook)
List chosen so all delegates should have some they are familiar with

EX 17: Selecting Artefacts

Consolidation for Phases B-D. Best run individually I think – probably give as evening work

EX18: Business Value Assessment

Perform L2 after Migration tools section

EX 19: BTRA –

Can be done in class as a group exercise or given as day 3 homework to be discussed next day – the risk slide example (Risk ID & Mitigation Worksheet) uses this for it's examples so if performed as homework the Risk slides come first – might like to mention this when you give out the homework or when discussing the slide

EX20: Assessing the Enterprise Capability

Based on Grub & Co V1.2.4

This is about Enterprise Capability Assessment so A is the main phase seeing as we are just leaving Primary
To assess ent capability we need to ideally perform a BTRA and assess risks probably by a Business Scenario

C (5) BTRA is major to what is being asked it is used in Phase A and phase E (ref 7.4.5) and chapter 30 (BTRA) BTRA includes a risk assessment (possible generated by B Scenarios mentioned in D)

D (3) poss, This takes us part of the way there but a BTRA is more comprehensive

A (1) Phase B is concerned with Business so will identify some risks but not all (are the business prepared to accept the latest version of Office?) Also is later than C & D

B(0) distracter Implementation Factor Assessment & Deduction Matrix in Phase E (slide & Manual)

EX 21: Architecture Contract

Dispensation P590

Concerns:

Securing trade secrets: Some of the work will use external contractors so for these a formal contract (with an NDA) a good point

Standard way of building: but unfortunately changes need to be made to accommodate compliance regulations

The project is about implementing a new process NOT about checking that the process is delivering good output (this is stated obliquely in the scenario text “standard approach for panel creation”)

According to the manual Dispensation is a temporary affair so in theory it cannot be used for accepting local compliance changes. In this version I have amended ans A to have the AGB amend the contract – can’t prove this from the book but logical

I think this question groups the answers into pairs – A & D correct, B&C not very good at all. B & C have correct elements in them but not very many. C has a trap in that the inspection work is for Business as Usual not the implementation of the new process which is the focus of the EA. The ranking of B & C is open to challenge, the ranking of A & D a bit more obvious

A: 5

D: 3

No need to re-create the contracts as they already exist but you should review them (as in A)

No mention of compliance reviews (as in A) this makes D less comprehensive than A

B: 1

Ist paragraph weak as per D 2nd Para talks about an automatic dispensation effectively removing control from Chief Engineer and AGB also dispensation wrong

C: Distracter

“You use issued contracts” not told contracts issued just prepared so review far better option. As an EA you are not interested in monitoring the quality of each panel you want to make sure the implementation projects are running correctly

2nd para is overkill – why would you wish to do this for **every** change request?

EX22: Transition Planning

V1.5.6A changed wording in question to indicate that Draft Imp & Mig plan only just being started – this moves activity back a bit – answers tweaked as well

There is a problem here as someone has jumped the gun and decided on three transitions. This may have been proposed at the Vision stage and the idea has “stuck” as ideas often do. This should be revisited in Phase E which is when Implementation Transitions should be made (on the basis of a consolidated Gap and a BTRA)

Stakeholder concerns the EA is asked to satisfy:

- 1) Is work too ambitious (for enterprise to cope with?) is there a risk here? a capability assessment/Business Transformation Readiness Assessment will help
- 2) Are projects going to give value? For this we need Business Value assessment technique

C: 5 (I think as meets needs)

A: 3. Meets Option 1 Asses transitions so should schedule for ent capability and also assesses risk OK (but should be done before DRAFT Imp & M plan. However this is grammar). Also this answer does not address the risk question or the Value. The State Evolution Table does not really cover value or risk and anyway the answer says use it to identify only Transition Architectures.

According to the book (P294) A consolidated Gaps wis not the planning tool for working out transitions – that is the Architecture Definition Increments table

D: (1) Meets 1 (option 2) need after a fashion. No mention of consolidation for gap analysis. Information about potential solutions probably B C D if you take book literally. Value Realisation will help option 2 however this occurs in Phase G and tests whether benefits achieved worry is should we starts so BVA better. Think this answer is weaker than A which is why relegated to third place

According to the book it is the **Architecture Definition Increments Table NOT the State Arch Evolution Table** which allows you to plan transitions. The SAET illustrates the BBs evolution

B: **Distractor** interoperability is not mentioned as a concern what about Value for Money etc?

EX23: Building in Security

Had a re-think on this one in V7 and re-drafted

The way I teach the security slides is that I take class through general (unhidden) intro slides then show them the Preliminary & Phase A slides. By this time the class have usually had enough and really don't want to go through the ADM cycle again. I tell them to read up on Chapter 23 before taking the exam then give them Ex 23 as the last exercise (I have done the 3 mock L2 exams by this time). One of the reasons for re-drafting this question is that now the information needed to handle it is all based on Preliminary & Phase A

This illustrates how we could be tested on adapting the ADM. For this knowledge of the additional security tasks in each stage is important (chapter 21). In the course we cover both SOA and Security very lightly – recommend that students read up on the chapters in the manual as part of their pre-exam study. This is based on the preliminary stage (guided by scenario) so could show relevant slides as an example

A=5 marks , Allocation of Sec A to implementation team premature

This now maps to the security requirements in the Preliminary phase

- Scope the enterprise organization units impacted by the security architecture
- Define and document applicable regulatory and security policy requirements
- Define the required security capability as part of the Architecture Capability
- Implement security architecture tools

Surprisingly the TOGAF document states that the EA can update the corp security policy in Preliminary Stage (P202 section 21.5 second para from the bottom second line from the bottom)

“You identify and record the requirements needed to address the Board’s concerns”. Everywhere else we are firmly told that requirements gathering starts in Phase A however P202 has a title in bold about requirements. These, I think, are slightly different requirements viz “regulatory & security policy requirements” so this statement in the answer is probably OK (as it mentions the requirements in conjunction with the “Board’s concerns)

D=(3) Starts well need to understand Snr Stakeholder perspective. Allocating a team probably not envisaged for liaison role and all work in progress excessive. According to the book “You identify the parts of the business which will be affected by any changes necessitated by increased security as well as those who will not be affected directly but may need to interoperate with the modified systems” is a correct activity for Preliminary (paraphrased some of the bullet points on P202)

While these are correct answers A has more correct answers (actually the best solution comes from combining both A & B)

C: (1) OK as far as it goes but no mention of adding security capability to the team etc. Securing endorsement occurs in phase A (p204 top para) . Again best we can say is that it is better than B the distractor

B: Distractor . Board not concerned with Time and Costs in this question.

“Based on your understanding, you then define necessary security-related management sign-off milestones for phases A to D” according to the book this takes place in Phase A (P204)

“Finally you hold a series of workshops to obtain management support for your security measures” as in C this takes place in Phase A (P204)

Practice L2 Questions (section 4 of workbook) answers

Q1 ACME Car Corp

Typically given as day 3 homework. If done in class usually done after exercise 18 before starting Phase E

3.3.1

Baseline or target first? - scenario talks about business but nothing else, also specifically states few architectural assets in repository (ie few BBs). Given that the company wish to reuse assets wherever possible we need to take a look at what we currently have. This means that we need to establish Baseline first if possible – question lists three points that need to be addressed

A:5 All three points covered (some with multiple artefacts) & baseline first

C:3 Only covers points 1 & 2 & baseline first

D:1 Wrong way round (Target first) covers 2 points (2 & 3)

B:0 Distracter artefacts do not exist & Target first

Ref manual section 35.6

			A	B	C	D
Application/Function Matrix	depict relationship between applications & business functions <ul style="list-style-type: none"> Assign usage of apps to business functions that are supported by them (apps that is) Support gap analysis & determine if any apps missing and will need to be created 	1	x		x	
Application Communications diagram	depicts all models & communication mappings between them	2?	x			
Application interactive matrix	depict communications relationships between applications	2	x	r	x	x
Application diagrams	not exists (Application Migration diagram??)	D		x		
Application & User diagram	not exists (Application & user Location diagram?) not support any requ anyway suggest rename	D		x		
Application Portfolio catalogue	List of all applications in Enterprise foundation for other matrices - done first (baseline)	D			x	
Application/Organisation Matrix	Depict relationships between applications & organisation units within the enterprise	D		x		
Data Entity/ Data Component catalogue	Identify & maintain list of all data use across Enterprise supports definition & application of information management & data governance policies & also encourages effective data sharing & re-use	3	x			x
Data dissemination diagram	Show relationship between data entity, business service & application components can show data replication				x	
Data Entity/ Business Function matrix	depict relationship between data entities & business functions within the Enterprise <ul style="list-style-type: none"> Understand the data & information exchange requirements between business services 	3	x			x
System/data matrix	does not exist	D		x		
System/Technology matrix	does not exist	D			x	

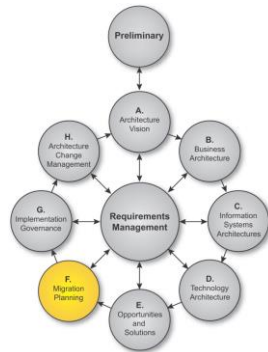
D= Distracter (not answers any requirement)

X is a change in v3.3.1 not present in previous workbook, r removed in V3.3.1

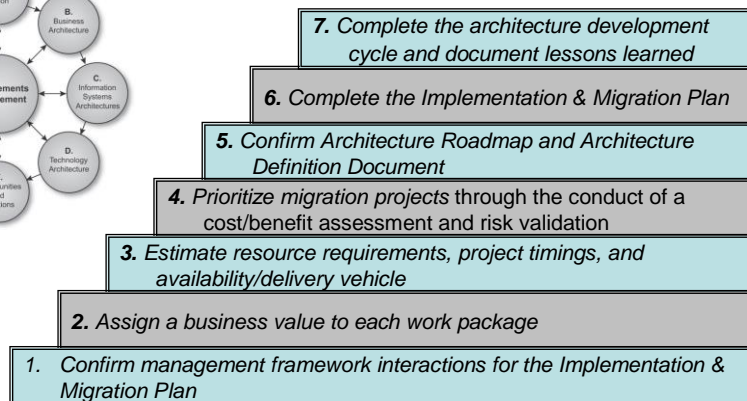
Q2 ACME Components

Typically done in class after Phase F has been covered.

We are at phase F



Steps



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T9.1 CERT L2 v1.0 - Slide 295 of 577

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A:5 marks

Describes three activities in phase F

B 3 marks

B is very close but not as comprehensive as A also Imp Factor & Deduction Matrix in E (already done)
time-lines Implementation & Migration Plan is this the draft plan (phase E)

C distracter

C is describing phase G

D 1 mark

Covers part of the tasks but only a small amount

Implementation Governance model in in phase F

Q3 Sunrise Hotels

Typically done in class after having covered adapting the ADM for iteration.

The company is up against a strict time limit so they do not want to go over work done previously

The target business process has been defined as have the applications & data domains (using COTS so they are pre-selected for us)

Nothing except the hardware is carried forward and the state of this is not clear. So we should start with understanding the hardware, we know the rest so into implementation planning

D (5)

Time is really short for this (100 hotels less than a year). The scenario tells us that the only thing being carried forward is the current hardware (which may need enhancing). We are told that the Business process is well understood and will not change. We are told that we will be using COTS so we have to accept the databases that come with the applications (according to TOGAF). As these are understood it makes sense in theory to work out what hardware upgrades are necessary (the only unknown) then consider how to implement the new architecture.

C (3)

A good answer but a lot of the work already done there is no need to go through B as business process already covered. Also no mention of the need for Baseline Technology in phase D

A (1)

As we are using COTS then the Data & Applications are fixed for us. Skipping B is OK theoretically as we have the target Business Process but we are still wasting time which is in short supply

Requirements already established

While this will provide a solution it will take waste more time than D & C.

B distracter: The one thing being carried forward is the existing technology so we need to visit D before moving to phase E

Q4 Talk Is Cheap

This can be done in addition to or instead of Exercise 15

The key to this question is that the stakeholder map matrix starting on page 256 of the TOGAF is the reference data for the assessment. It is not a subject exercise based on students experience/opinions. Even though the TOGAF document refers to it as an example Matrix, for exam purposes, it is the only source available.

Sue is a member of both Human Resources (Keep satisfied) and the Board (keep Informed) From the power interest matrix if someone is both classifications, their combined/resultant classification will be Key Player (high power and interest)

Bill is part of Procurements and according to the matrix is therefore a Key Player.

Kate is a Program manger and therefore part of the PMO. This makes her classification according to the document as Keep Satisfied. She is NOT a project executive, and the entry in the document that some students might incorrectly refer to (Project Executive eg Program Manager) just means that that role could be fulfilled by a ProgMan, not that it IS always filled by a ProgMan.

Based on the above

A = 1

B = 5

C = 0

D = 3