Approaches to Business Architecture

An Introduction …….

This is an abridged version of the EA Forum presentation

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Approaches to Business Architecture

"Interest in business architecture is growing dramatically. During the past two years both IT and business leaders have joined the discussion about the need for a well-defined business architecture.

Though there is a great deal of discussion, there is little consensus about what business architecture is, how it should be pursued, and what value it delivers.

Business architects in IT as well as in the business have started developing business-unit-wide and enterprise-wide business architectures, learning as they go. Their ultimate goals are to improve business decision-making and facilitate better alignment between IT and the business units it supports.

Architecture teams that want to play a leading role in business architecture development must start soon or be left behind."

Jeff Scott, Forrester Research, 2008

What is Business Architecture?

The Open Groups view (O-BA Part I) …

"The formalised description of how an organisation uses its essential competencies for realizing its strategic intent and objectives."
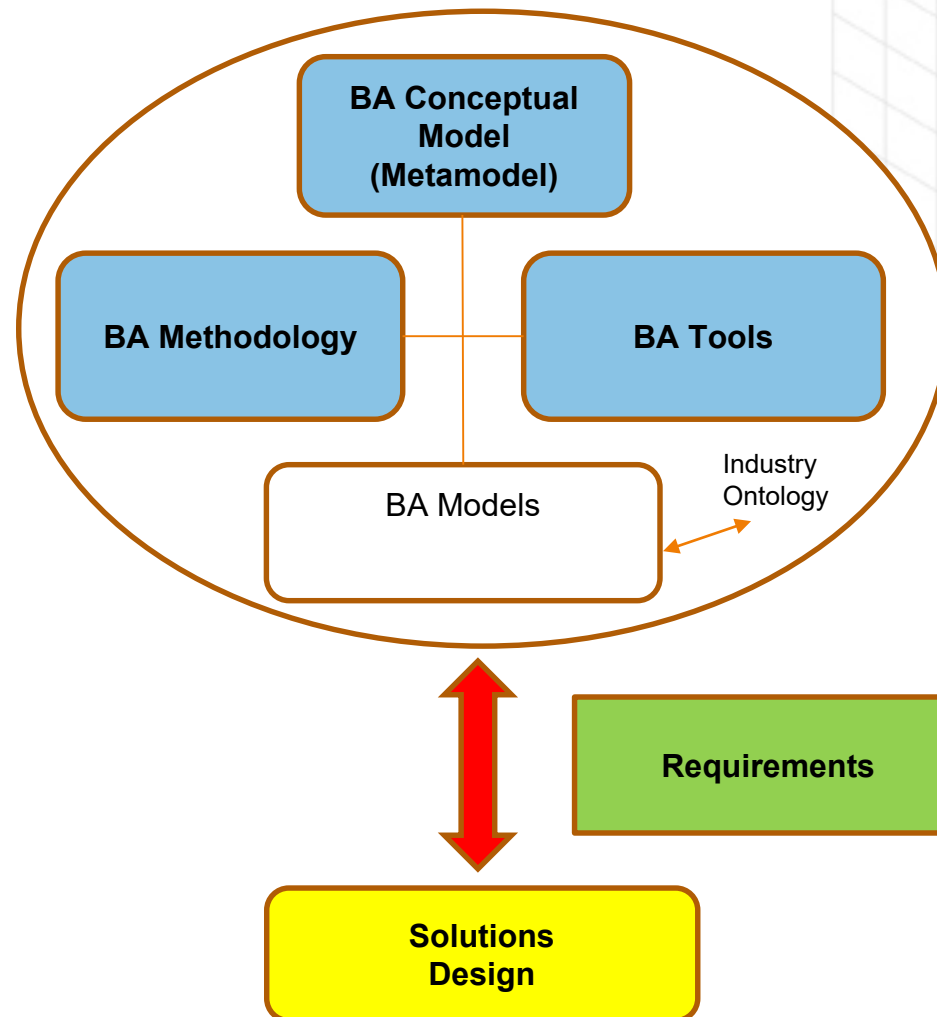
What is Business Architecture?

Business Architecture Working Groups updated ….

*"A **Business Architecture** is a formal blueprint of governance structures, business semantics and value streams across the extended enterprise. It articulates the structure of an enterprise in terms of its capabilities, governance structure, business processes, and information. The business capability is "**what**" the organisation does, the business processes, are "**how**" the organisation executes its capabilities.*

It includes *"articulating the governance and information"* of the organisation and, *"In defining the structure of the enterprise, business architecture considers customers, finances, and the ever-changing market to align strategic goals and objectives with decisions regarding products and services; partners and suppliers; organisations; capabilities; and key initiatives."*

What is a Business Architecture Framework?

The architecture of an architecture framework …

What is a Business Architecture Framework?

BA Conceptual Model

❑ Is a metamodel or modelling language

❑ Offers modelling constructs that cover fully or partially, the business domains of an enterprise

❑ The core of the conceptual model can be presented in a business capability map and high level business process models, using business goals and strategies as input and IT strategy and application portfolio contents as output.

❑ The constructs are applied in BA models (i.e. instances of the conceptual model) in the context of a real world enterprise

What is a Business Architecture Framework?

BA Conceptual Model is not a "Business Model"

"A Business Model is a conceptual tool that contains a set of elements and their relationships and allows expressing a companies logic of earning money."
Osterwalder 2004
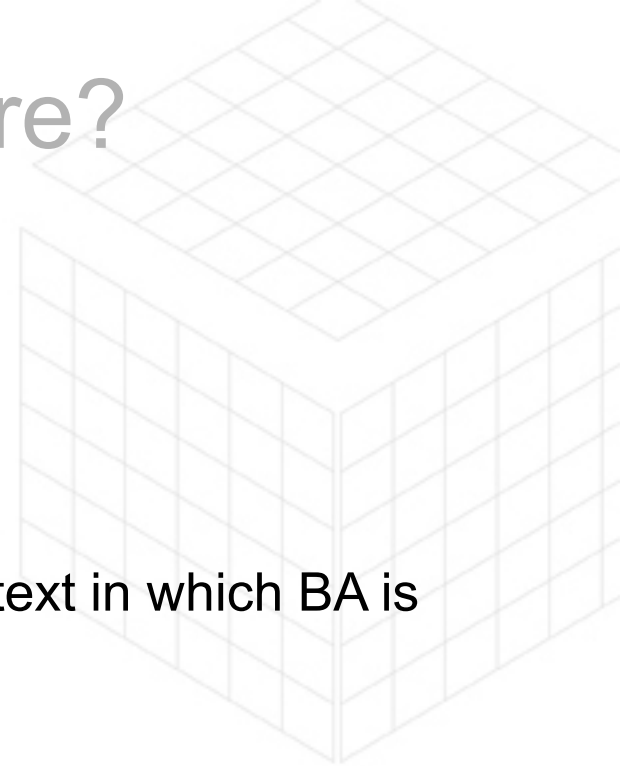
What is Business Architecture?

BA Methodology

Describes:

- ❑ The development process of BA models
- ❑ The techniques that are used in the specific context in which BA is applied

In a Process Model or Structured Procedure:

- ❑ The methodology explains the responsibilities to be defined
- ❑ The activities to be executed
- ❑ The principles to be considered
- ❑ The methodology would include design principles, best practices, reference models and use case scenarios

What is Business Architecture?

BA Tools

Business Architecture Tools support:

❑ The engineering (design & construction) of the BA models

❑ The BA methods used in the enterprise

They should provide the functionality to develop, to visualise, analyse, and eventually simulate aspects of the BA.
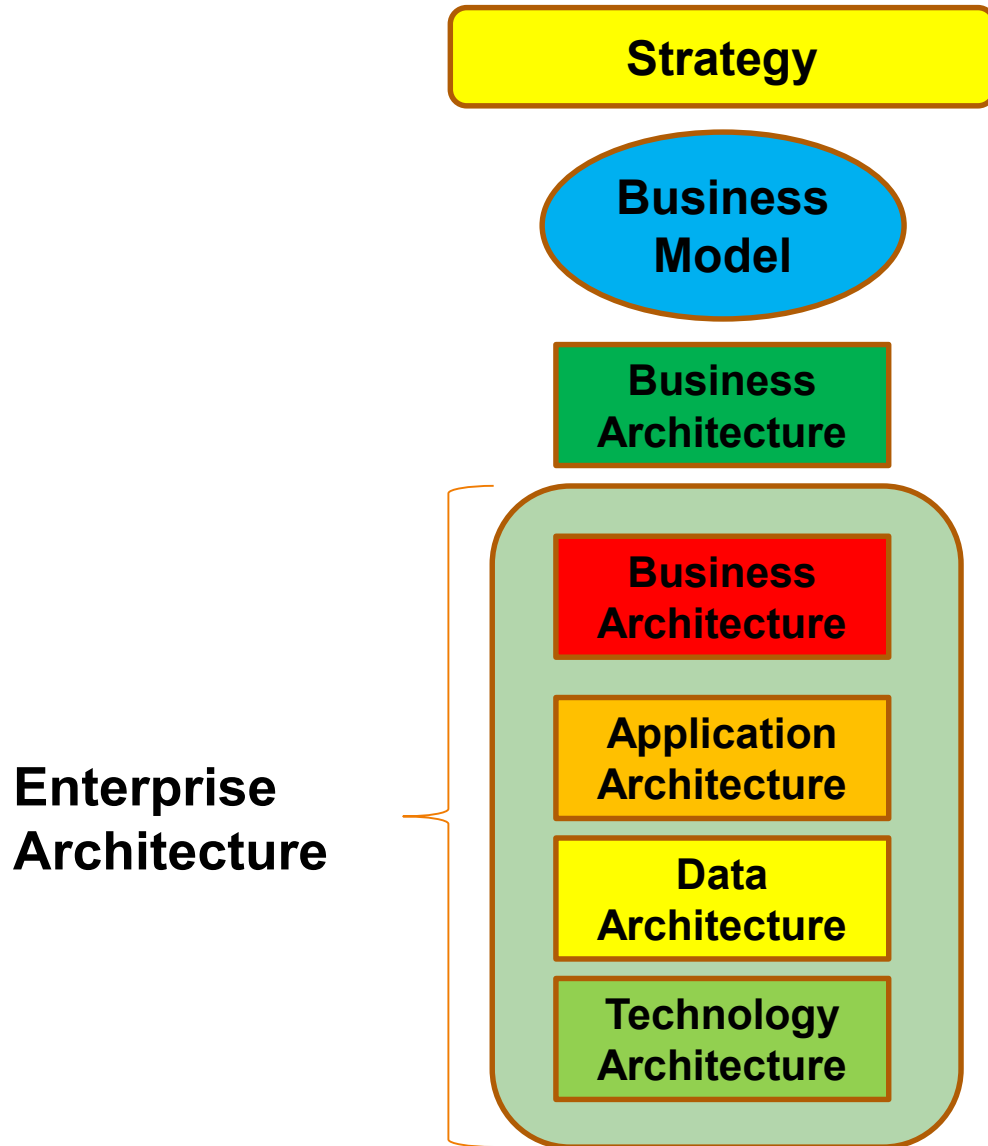
BA Frameworks

BIZBOK and O-BA

2

LEADING ENTERPRISE ARCHITECTURE VALUE™

Business Architecture in an EA Context

```
┌─────────────────────────────┐
│          Strategy           │
└─────────────────────────────┘

         ╭───────────╮
        │  Business   │
        │   Model     │
         ╰───────────╯

┌─────────────────────────────┐
│         Business            │
│       Architecture          │
└─────────────────────────────┘
```

Enterprise Architecture

- **Business Architecture**
- **Application Architecture**
- **Data Architecture**
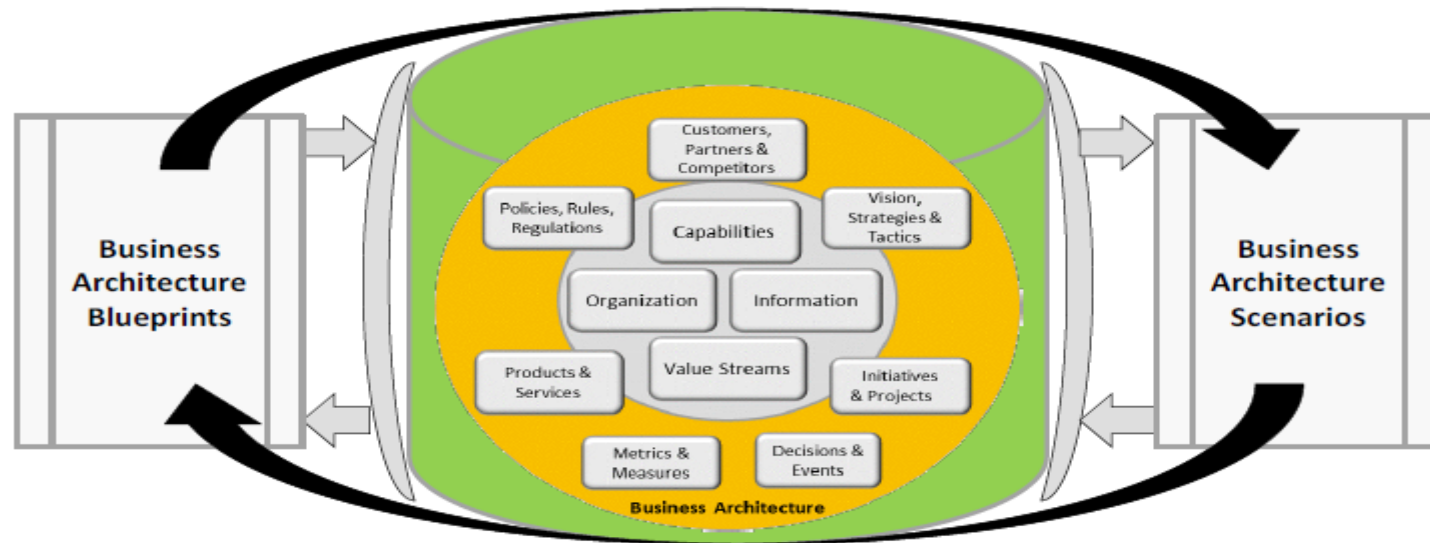- **Technology Architecture**

Business Architecture Frameworks

A Guide to the Business Architecture body
Of Knowledge (BIZBOK)

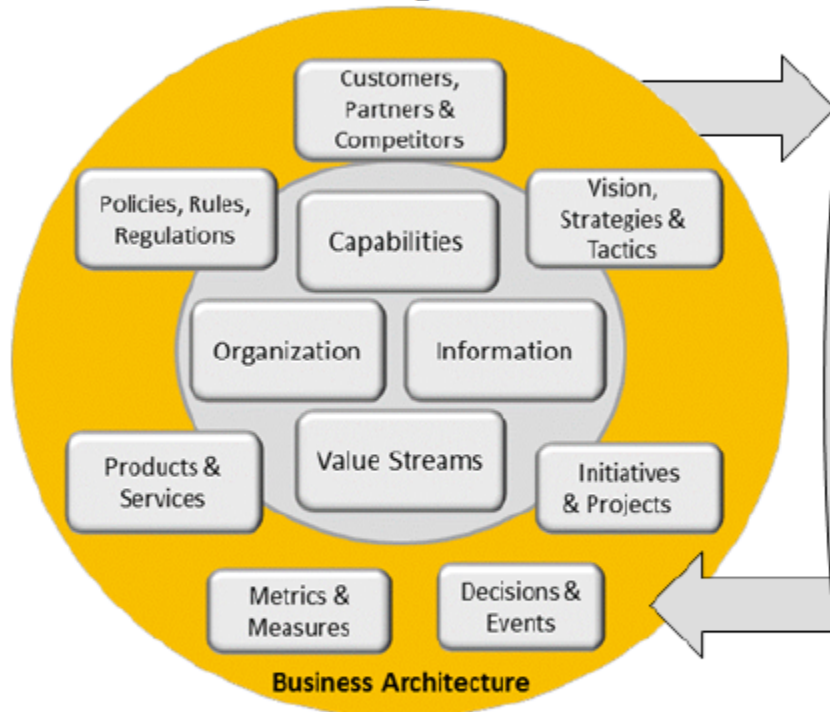The Business Architecture Guild

The Business Architecture Framework

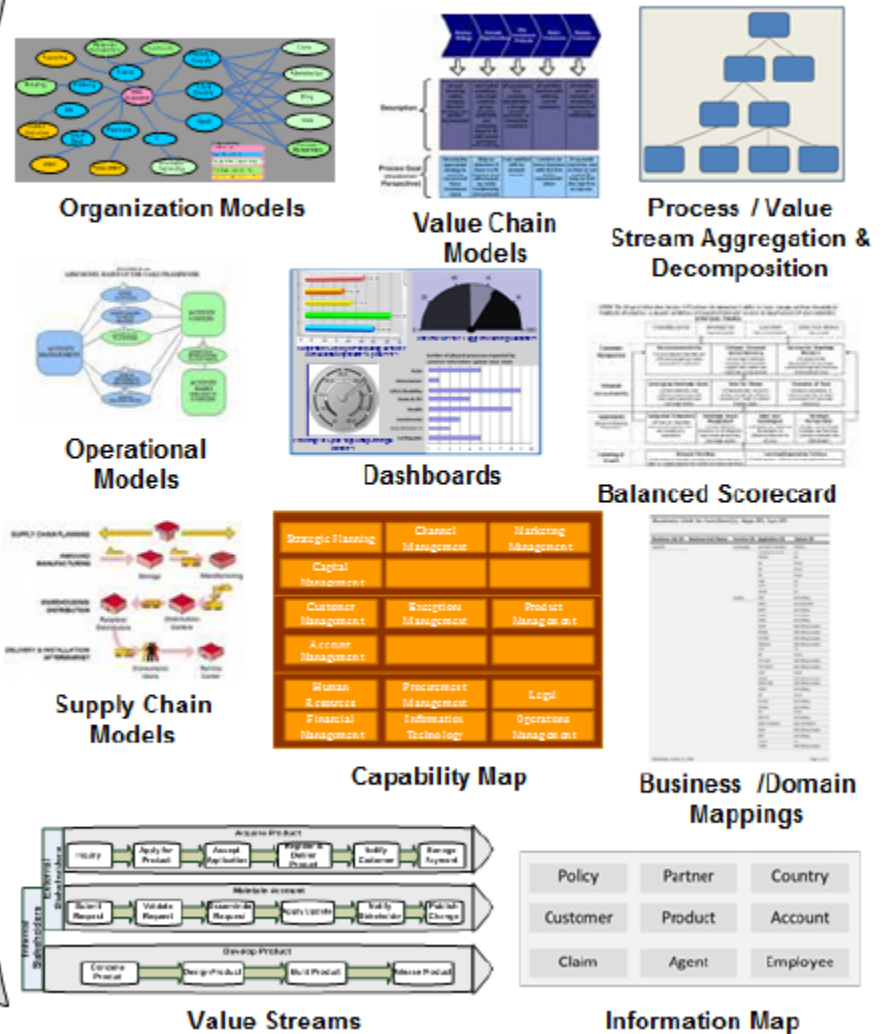A framework is used to build the business architecture concepts, to combine and relate them in meaningful ways.

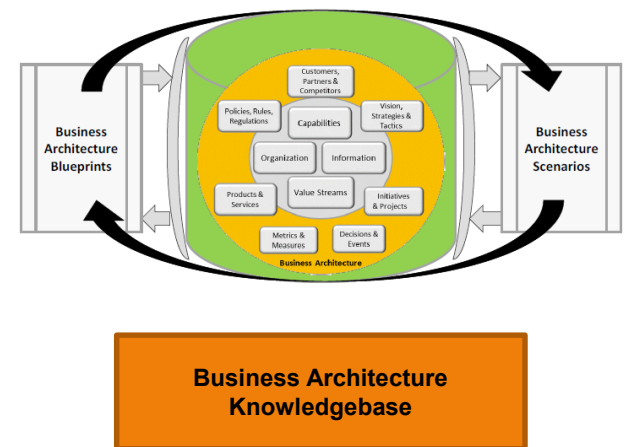Business Architecture Blueprints

Business Architecture Scenarios

Customers, Partners & Competitors

Policies, Rules, Regulations

Capabilities

Vision, Strategies & Tactics

Organization

Information

Products & Services

Value Streams

Initiatives & Projects

Metrics & Measures

Decisions & Events

Business Architecture

Business Architecture
Knowledgebase : Part 5

Blueprints

Business Architecture "Knowledgebase"

- Customers, Partners & Competitors
- Policies, Rules, Regulations
- Capabilities
- Vision, Strategies & Tactics
- Organization
- Information
- Products & Services
- Value Streams
- Initiatives & Projects
- Metrics & Measures
- Decisions & Events

Business Architecture

Blueprints Built on Common Foundation

- Organization Models
- Value Chain Models
- Process / Value Stream Aggregation & Decomposition
- Operational Models
- Dashboards
- Balanced Scorecard
- Supply Chain Models
- Capability Map
- Business / Domain Mappings
- Value Streams
- Information Map

Business Architecture Principles

❑ Business Architecture is Principle driven

❑ Each major section has a set of principles that guide actions associated with individual blueprints and related practice areas

❑ Core principles include:

1. Business architecture is about the business
2. Business architectures scope is the scope of the business
3. Business architecture is not prescriptive
4. Business architecture is iterative
5. Business architecture is reusable
6. Business architecture is not about the deliverables

Components of the BIZBOK Framework

Part 1: Introduction

Part 2: Business Architecture Blueprints

Part 3: Business Architecture Practice
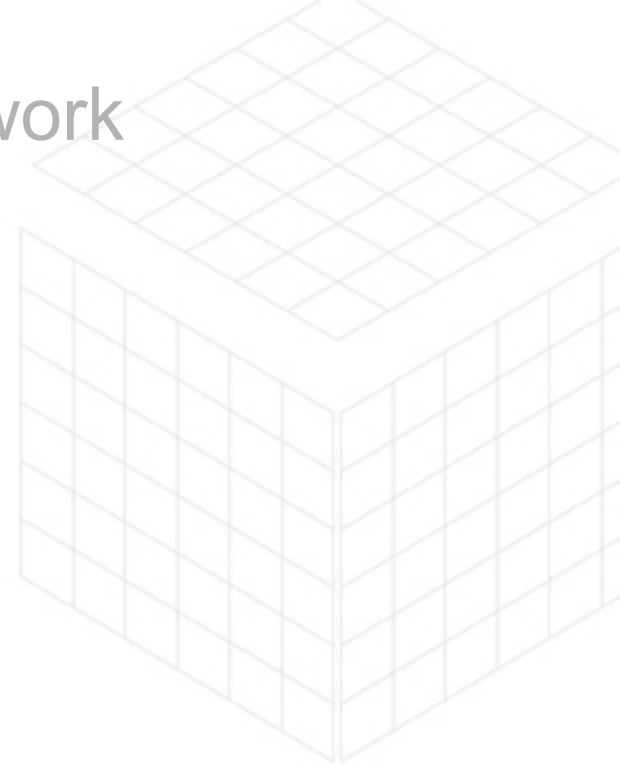
Part 4: Business Architecture Scenarios

Part 5: The Business Architecture Knowledge Base

Part 6: Business Architecture and IT Architecture alignment

Part 7: Business Architecture Case Studies

Part 8: Business Architecture Reference Models

Part 9: Feedback Structure

The Open Group
Open-Business Architecture: Part 1

Open Group: O-BA

Introduction to the **Preliminary** Standard

Part I :

- Provides a Business Architecture Framework with a focus on decision making and direction setting

Part II:

- Provides practice context, business architecture process, contribution to enterprise transformation, views and viewpoints

Part III:

- Provides Techniques & Guidelines

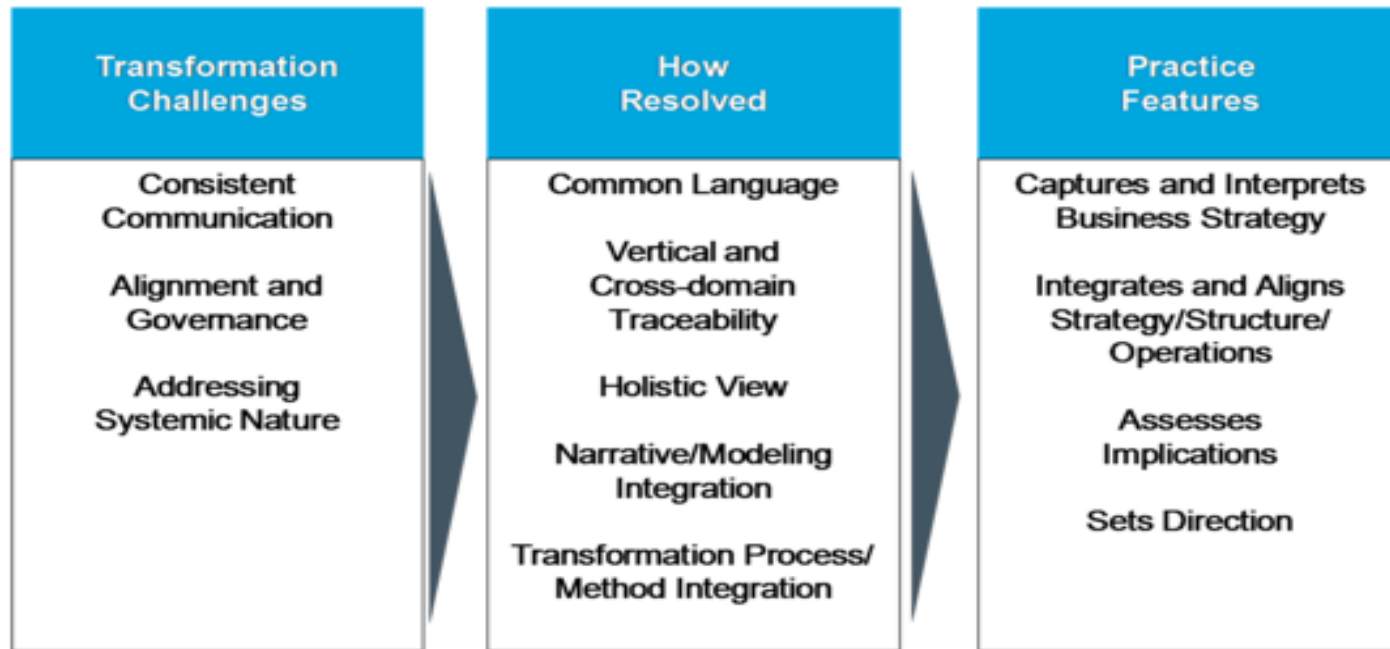| Decision making; Direction Setting	Development / Implementation	Grow Maturity Level
Shape Ideas → Create Vision → Develop Strategy & Plan	Design, develop and implement	Optimize and learn

O-BA: Objectives

Part I describes an approach to the practice of business architecture in the decision-making and direction-setting phase of transformations to enterprises and organizations. Three transformation challenges have been considered in the development of this standard:

| Transformation Challenges	How Resolved	Practice Features
Consistent Communication	Common Language	Captures and Interprets Business Strategy
Alignment and Governance	Vertical and Cross-domain Traceability	Integrates and Aligns Strategy/Structure/Operations
Addressing Systemic Nature	Holistic View	Assesses Implications
	Narrative/Modeling Integration	Sets Direction
	Transformation Process/Method Integration	

O-BA:Overview

- This standard defines an approach for taking a holistic view of the organization.

- It considers the contribution of the outer boxes

- It develops artifacts for the 3 domains which are considered of equal importance and inter-dependent.
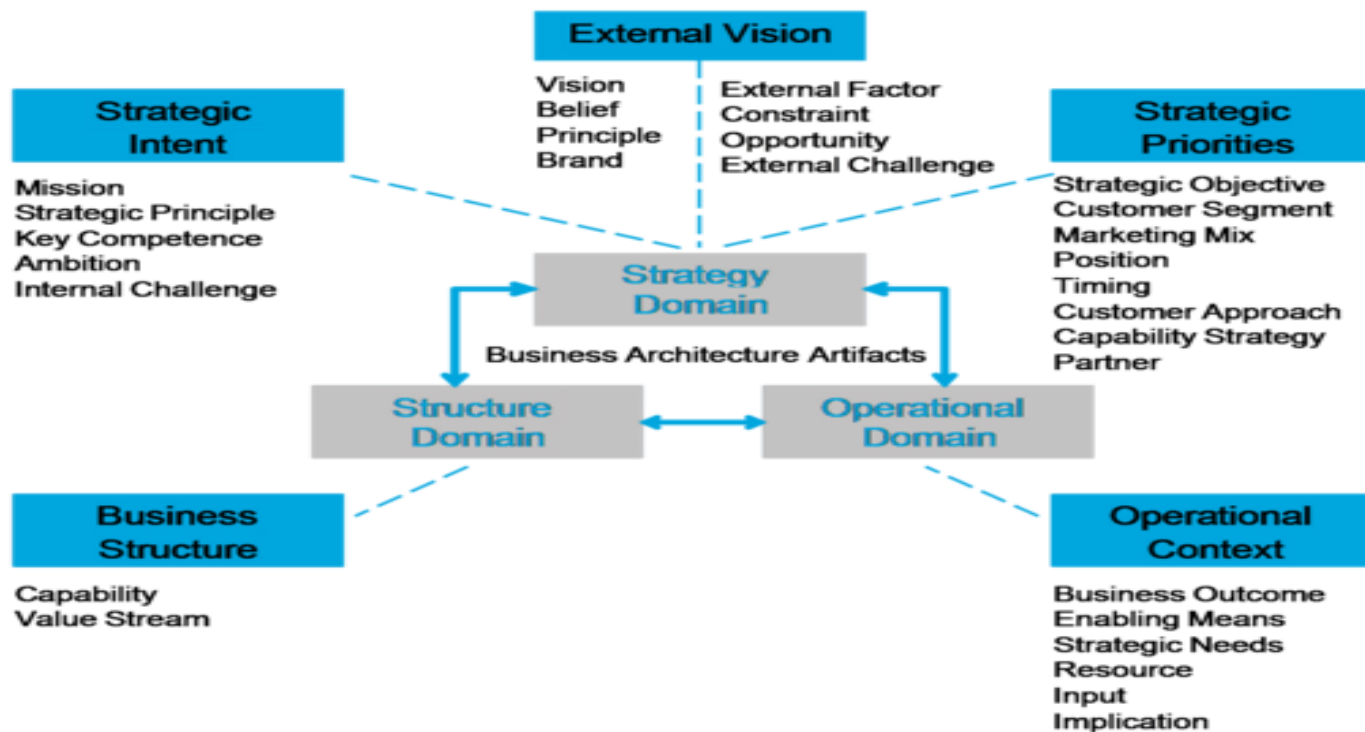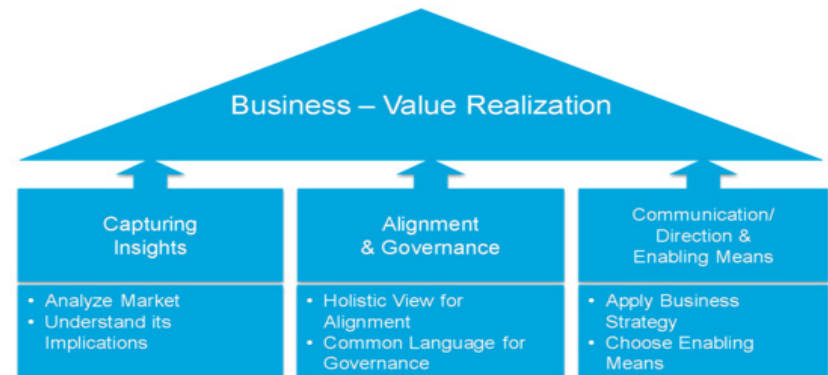
Section 3: Approach

3.1 Process

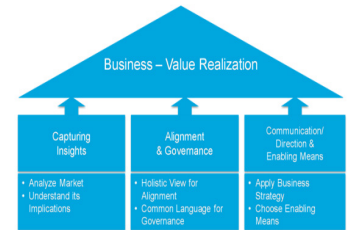## 3.2 Relationship to the TOGAF Standard
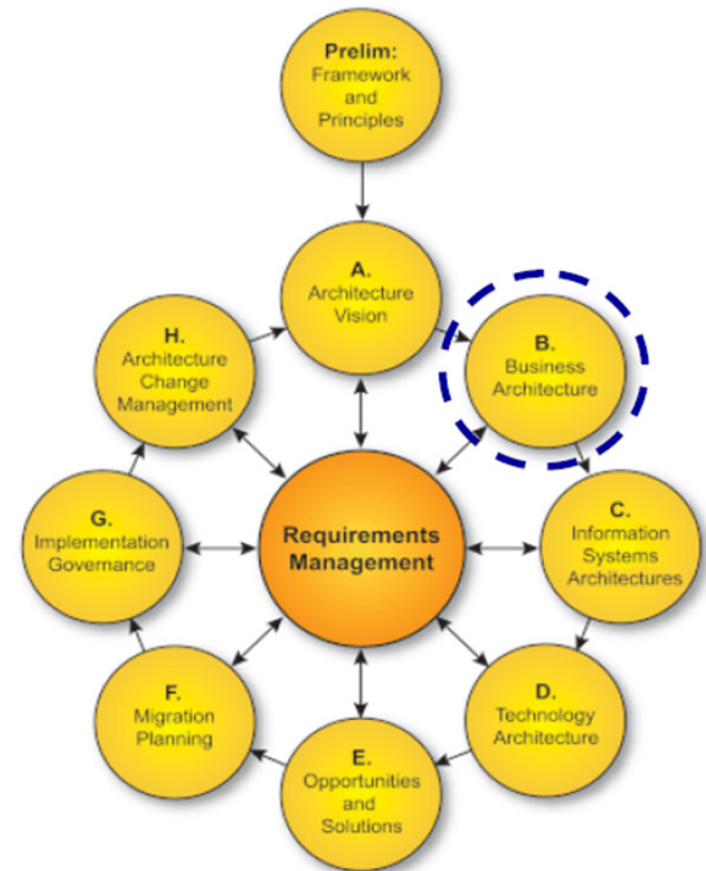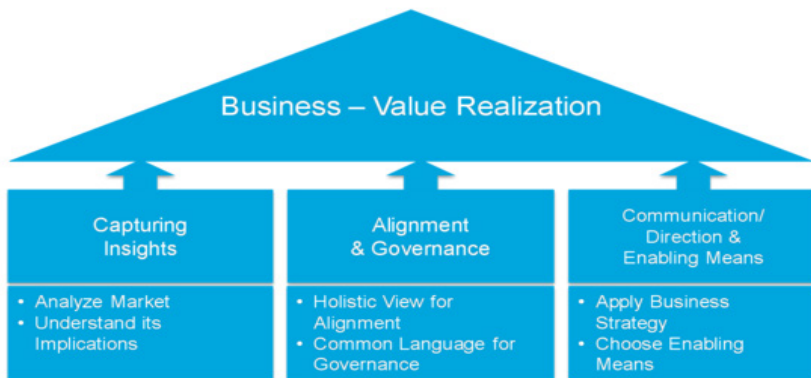
Section 3: Approach

✓ A business architecture practice should address the full cycle of transformations to an enterprise or organization.

✓ Part I focuses on the decision-making and direction-setting phase of an enterprise transformation.

✓ It defines a structured process for alignment of business strategy with business structure and the operational context.

✓ Part II of the standard elaborates the process in further detail as well as addressing the design/develop/implement phase.

Business – Value Realization

Capturing Insights	Alignment & Governance	Communication/ Direction & Enabling Means
• Analyze Market • Understand its Implications	• Holistic View for Alignment • Common Language for Governance	• Apply Business Strategy • Choose Enabling Means

Section 3: Approach

3.1 Process:

A 3 step process is defined to deliver value:

1. **Capturing Insights** – analysis of trend or market situation to provide stakeholders a global and traceable understanding of how impacting elements fit together

2. **Alignment & Governance** – create a holistic view and integrate representations of business strategy, business structure and operations via common natural language

3. **Communication / Direction and Enabling Means** – output of first 2 steps is applied to the business structure and operational context domain.

Section 3: Approach

3.2 Relationship to the TOGAF Standard

- The standard can be used with the TOGAF ADM during the first 3 Phases

- That will set the context and direction for Phases B to H,

- And when required, explicitly develops the transformation roadmap and transformation governance

- The TOGAF 9 Content Framework has been expanded to accommodate a common language

Section 3: Approach

3.2 Relationship to the TOGAF Standard

- The extensible content concept of the TOGAF 9 Content Framework, can be used to add content-type elements.

- Most additions will extend the Motivation Extension.

- A handover model is needed between the decision-making and alignment phase and the development phase to ensure consistent communication between stakeholder roles
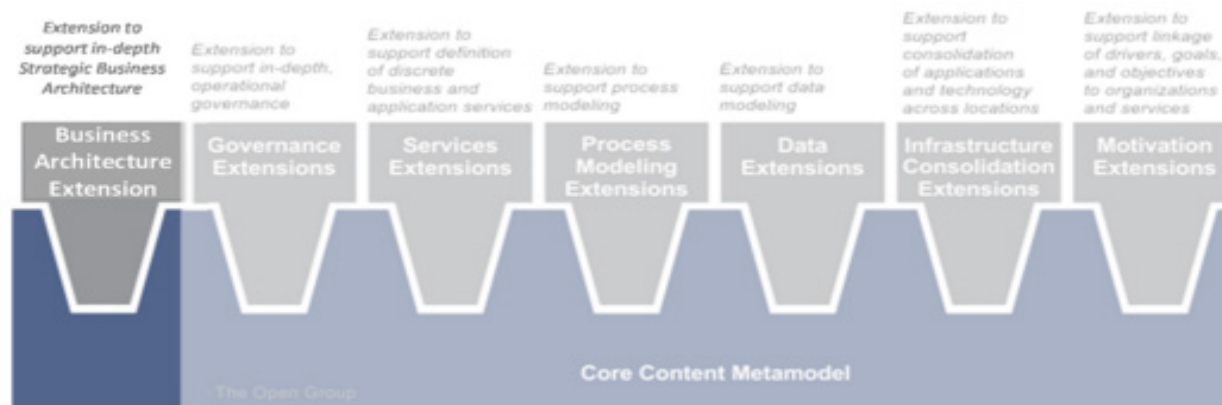
Section 4: Challenges Addressed by the Standard
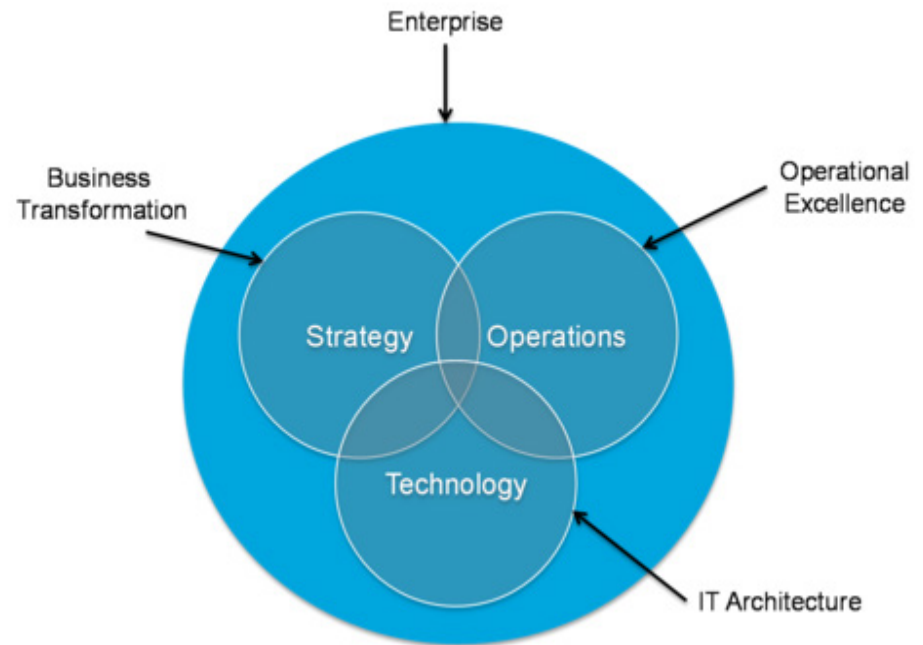
4.1 Enterprise Context and Today's challenges

4.2 Business Architecture Practices

4.1 The Enterprise Context and Todays challenges

- Organisations are continuously in flux

- New technology trends cause strategic change

- Structural and persisted challenges occur in enterprise transformations and change initiatives. The 4 traditional approaches used, shown

  in the diagram, have often

  failed
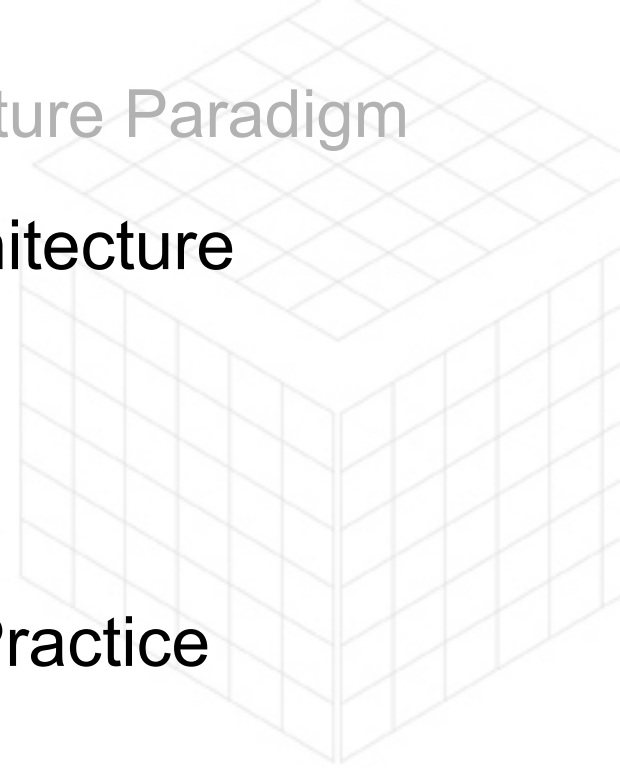
4.2 Business Architecture Practices

- The notion of business is: "*anything that relates to organizing the exchange of goods and services by a business, a governmental institution, or an agency*".

- And business architecture is defined as a: "*formalized description of how an organization uses business competencies essential to realizing strategic intent and objectives*".

- The boundaries of the practice range from:
  1. Business understanding and business strategy to the implications for operations
  2. Large business transformations to small change initiatives
  3. Initiative ideas to deploying the target structure and operations

- This standard supports and complements the TOGAF vocabulary with additional concepts for understanding, capturing, and describing business architectures.

5.1 The Added Value of Business Architecture

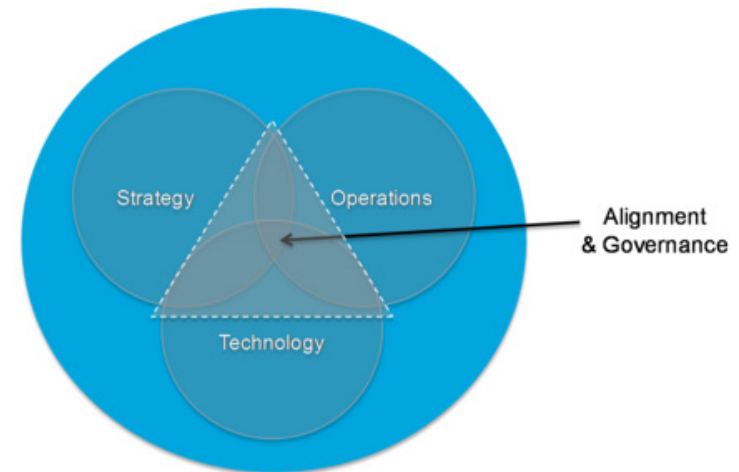5.2 Success Factors

5.3 Requirements of a Standardised Practice

5.1 The Added Value of Business Architecture

A holistic view combining strategy, operations, and technology as shown in the diagram is key to achieving a resolution

Specifically this standard provides:

- A strong **means for communicating** business strategy and needs to all managerial levels and disciplines

- **Consistent communication** of the holistic and traceable understanding of how elements fit together in business domains
.

- **A means to mitigate risks** through a transparent view of both the inter-dependencies between business entities and vertical view between strategy and operations

- **Stewardship of understanding business implications** caused by substantial changes in technology and/or environmental aspects

Strategy — Operations — Alignment & Governance — Technology

Section 5: A Standard Business Architecture Paradigm

5.2 Success Factors

- A Business Architect is able to provide reference of business needs and priorities for decision-making on transformation or changes.

- Embeds the BA role in governance processes. They are most effective if they can do homework first, and then apply it many times at different transformation initiatives

- Uses a common language to remove ambiguity in the communication.

- Avoids project failure by engaging the business architect as early as possible in the lifecycle.

- Ensures that traceability from strategy needs to operations and cross-domain can be communicated easily.

5.3 Requirements of a Standardized Practice

In order to address the challenges of organizational transformations and change initiatives, six requirements are defined for the Business Architecture Practice

1. Common language to discuss, share, and communicate consistently the holistic view and business strategy (optional)

2. Vertical traceability between business strategy, business structure, and operations

3. Horizontal traceability between different parts of a business

4. Holistic view to assure alignment of all relevant factors

5. Alignment of various stakeholders with differing interests and concerns

6. Integration of the transformation process and the method to assure that content preparation and decision-making are just enough and just in time

## 5.3.1 Remove ambiguity by using a Common Language

For unambiguous communication of business vision and strategy a common natural language is recommended; a *natural* language since the audience consists of many disciplines and management levels; and a *common* language since in a rapidly changing world iterations and feedback from operations to structural or strategic level are critical.

- The common language assures easier and better communication about implications of trends or events. This standard includes a set of concepts that constitute a reference for the common language. These concepts are explicitly defined and more importantly are *integrated* with the way of thinking, way of modeling, way of organizing, and way of working.

- Natural language facilitates conversation of technical and non-technical stakeholders. However, with respect to information technology, more technical modeling techniques are required for translating business needs into information, application, or technology requirements. To achieve this it is necessary to complement the O-BA Standard with other architecture frameworks such as the TOGAF framework and visual representation notations such as the ArchiMate® modeling language
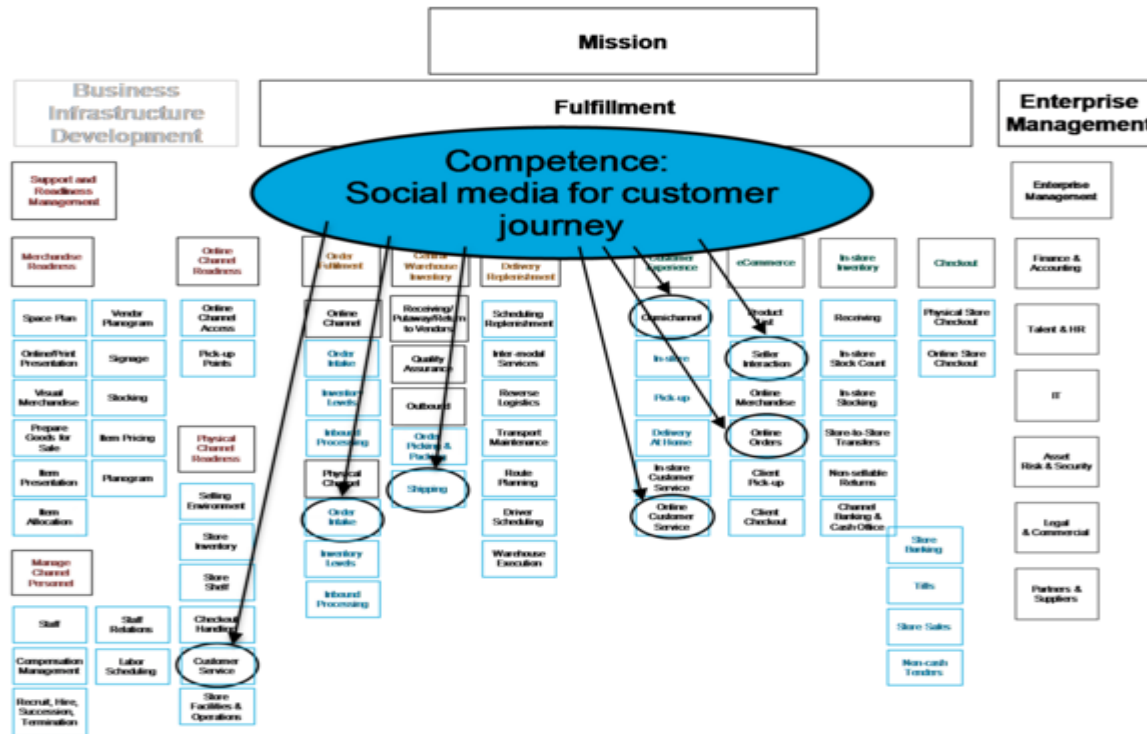
5.3.2 Ensure Vertical Traceability

- Vertical traceability assures transparency and enables alignment and governance

- It enables the analysis and identification of the implications of industry developments and business strategy for the business structure and operations.
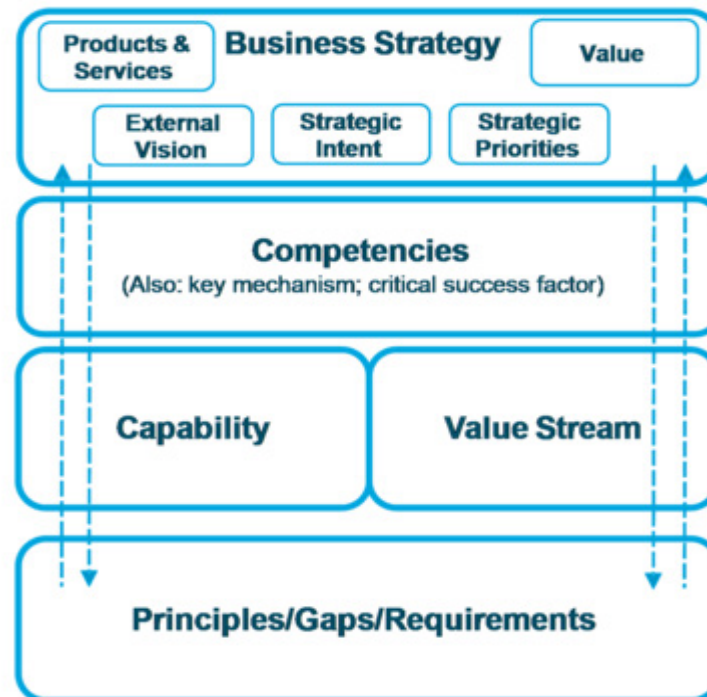
5.3.3 Ensure Horizontal Traceability

Horizontal traceability is needed to identify which elements must be included to adhere to a principle, or realize a competence or capability. It is critical for understanding cross-domain dependencies and investments

Section 7: BA Views and Viewpoints

Views Required By The standard

1. **Strategy** view

2. **Structure** view

3. **Operational Context** view

Altogether the deliverables developed in the three views represent a holistic view of the enterprise and the challenges ahead.

In general, the following views should be included:

*   External vision, strategic intent, strategic priorities
*   Structure description business capability overview, including horizontal and vertical traceability
*   Operational context and implications for the change area

Section 7: BA Views and Viewpoints

7.1 Critical Views

7.1.1 Strategy Views – typically narratives, which describe:

- The **External Vision** – the market situation and implications

- The **Strategic Intent** – what the organisation wants to achieve and the key mechanism for accomplishing it

- The **Strategic Priorities** – for each business aspect (Customer, Market, Product etc.)

- A **Competence Map** – the maturity level needed to accomplish the strategic intent
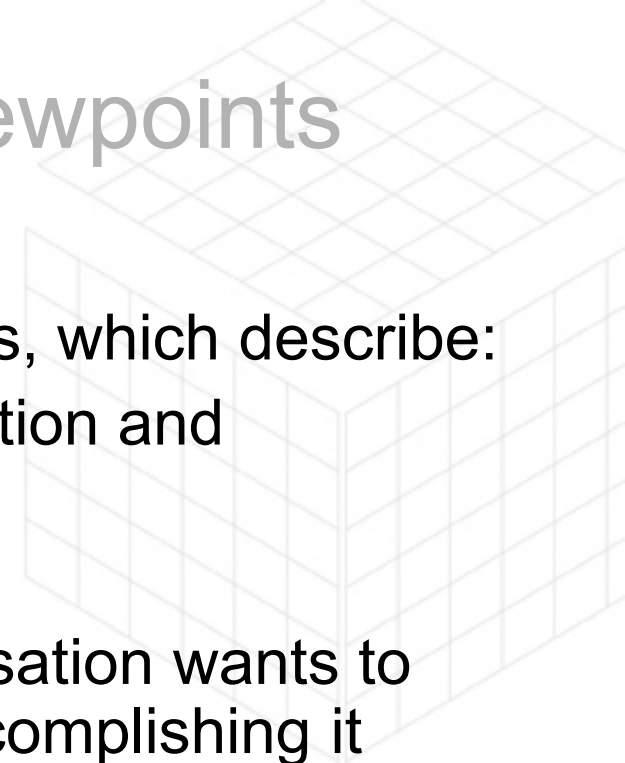
7.2 Views: Strategy

7.2.2 Strategic Intent: Key Competence Map
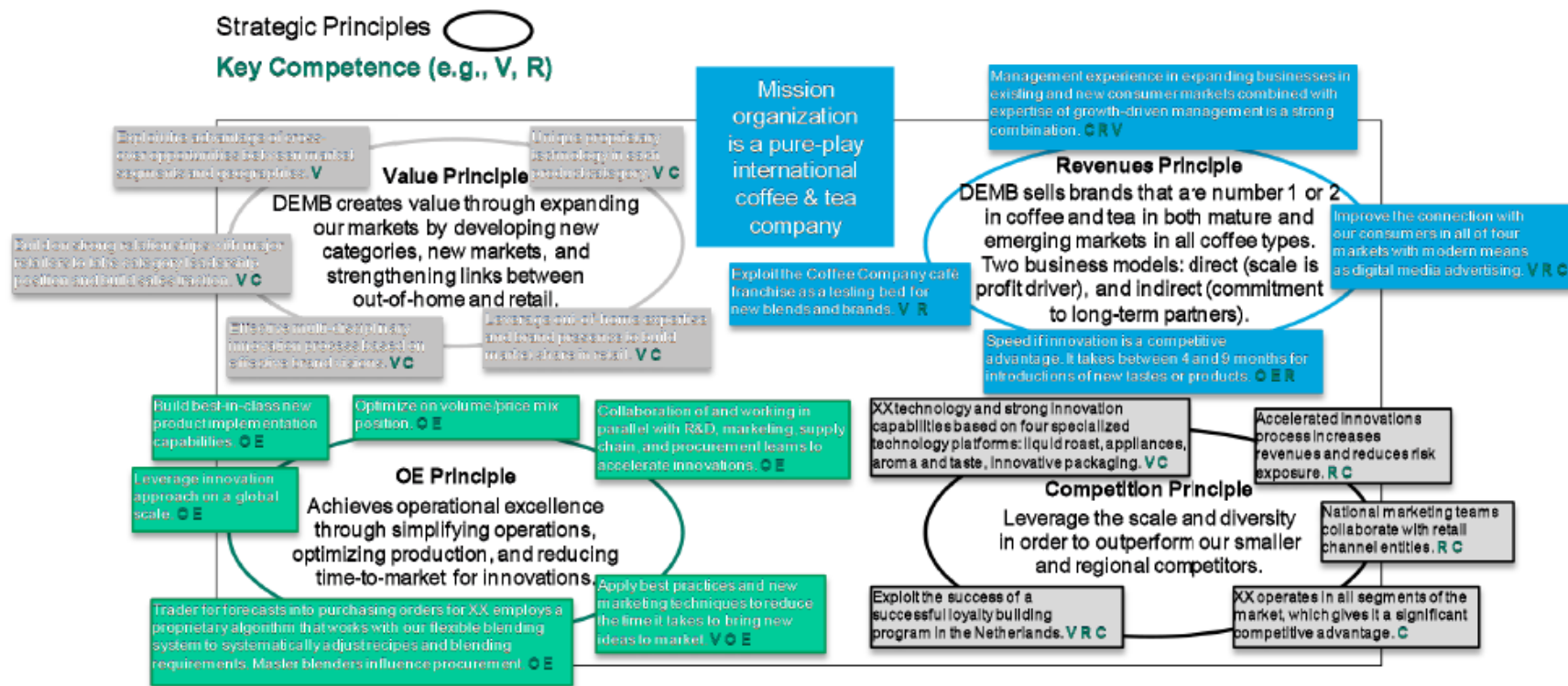
Section 7: BA Views and Viewpoints

7.1 Critical Views

7.1.2 Structure Views – typically narratives, which describe:

- The business *Capability Map* or *Capability Hierarchy* – a decomposition of the mission of the enterprise

- A *Value Chain* – the total value produced by the end user and consists of value activities and margin

- The *Capability Map* or *Capability Hierarchy* – shows how business capabilities are arranged

- *Competences* – a system property that is required to emerge from the business system

- **7.3 View: Structure**
- **7.3.1 Capability Map: Capability Hierarchy and Key Competence Mapping**
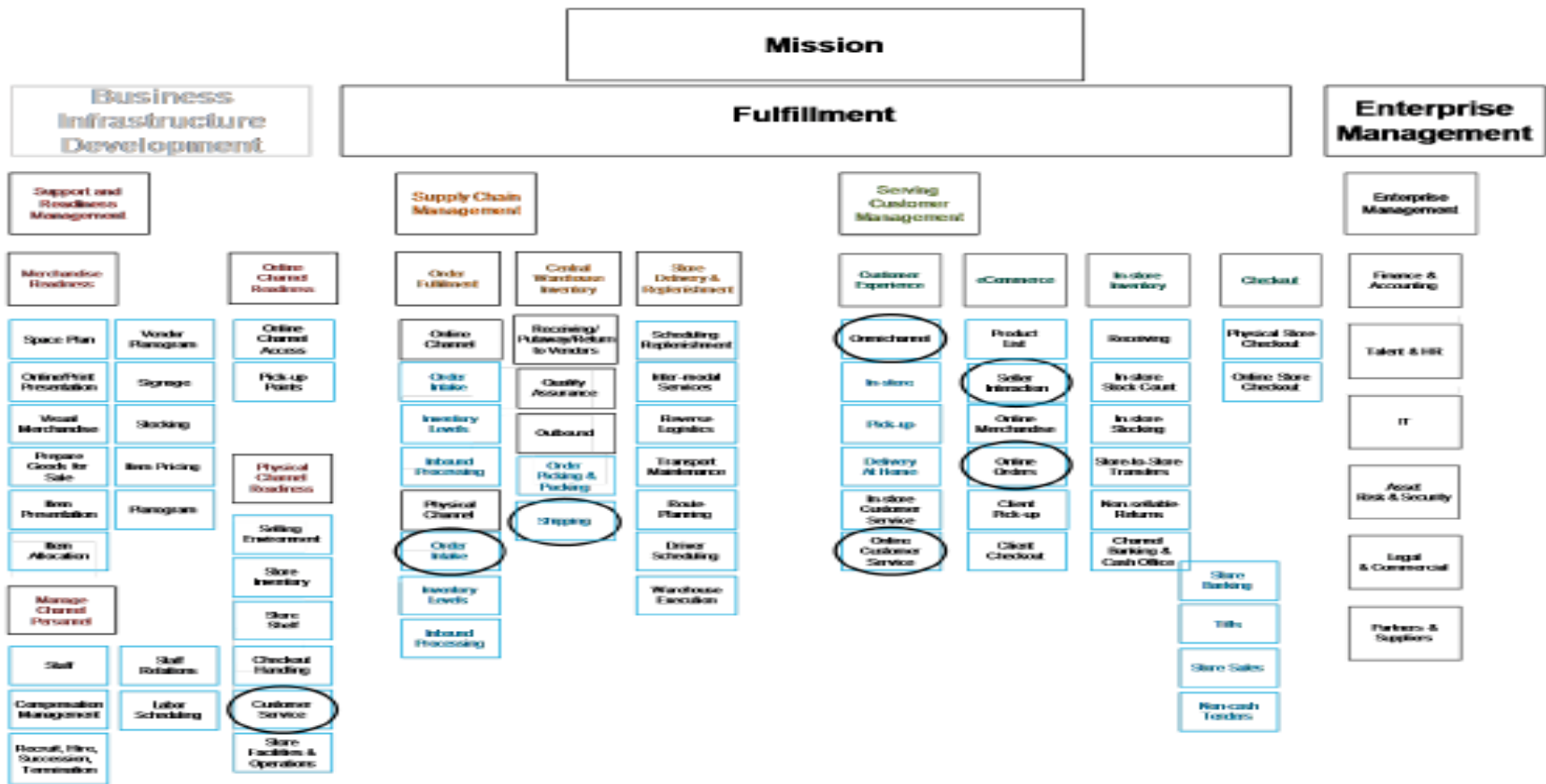
Section 7: BA Views and Viewpoints

7.1 Critical Views

7.1.3 Operational Context Views
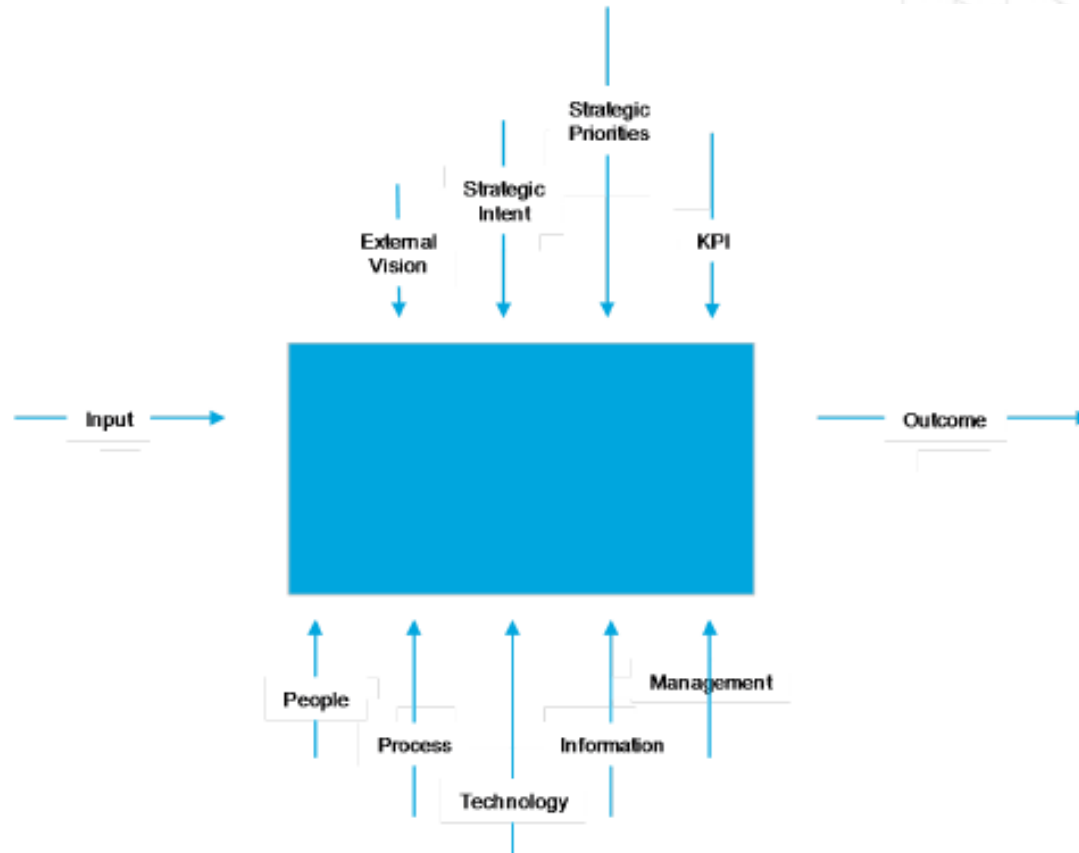
- An **Operational Context** View – for integration of all aspects at operational level

- A **Business Service** – the value of a capability that enables the fulfilment of the need of a consumer service

- **Enabling means** contribute to the accomplishment of the goal and performance of a business capability

- **7.4 View: Operational Context**

Where do we place the BA capability?

2

Where does Business Architecture fit?

- The Business Solutions Frameworks – Strategic Planning, Business Model Management, Business Architecture, Enterprise Architecture, Systems Development, Project and Program Management, IT Operations Management, Capability Management, Change Management, Funding and Procurement will need to be integrated.

- Where Business Architecture sits will most likely be a journey. It may start in one place and move later, as it is seen to be delivering value, and business and IT executives come on board, but always subject to the maturity, constraints and politics of the organisation.

So we want to set up an Architecture Practice …

The starting point is a set of Engagement Principles:

1. Understand the organization.

2. Gain executive sponsorship.

3. Interact with stakeholders.

4. Communicate the architecture.

5. Demonstrate value.

6. Establish a sustainable proposition.
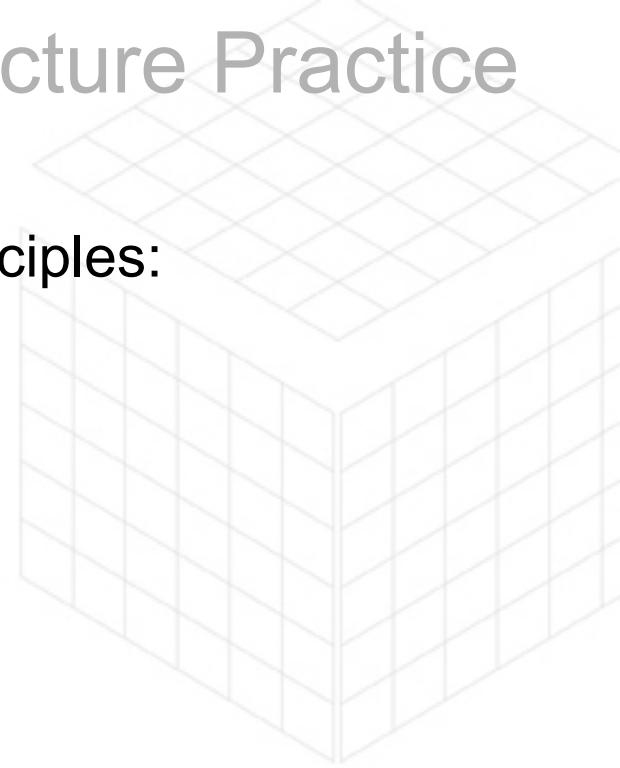
So we want to set up an Architecture Practice ...

The Seven Building Blocks of Business Architecture

7. Refine efforts through iterative projects

6. Fine tune engagement model

5. Initiate projects / mature knowledgebase

4. Focus on top business priorities

3. Establish foundational knowledgebase

2. Deploy team based on agreed governance structure

1. Determine business objectives, governance and engagement models

Common approaches to getting started ....

Major Roles Required

– Business Sponsor

– Business Architecture Team Leader

– Business Architecture Team Subject Matter Experts

– Architecture Mapping Expert

– Mentoring Expertise

Setting Up the BA Capability

Where are they reporting now?

Business Architecture reports into :

- ❖ The Enterprise Architecture Function (IT)

- ❖ CIO (IT)

- ❖ CTO (IT)

- ❖ COO (Bus)

- ❖ GM or Head of Change Management; Transformation, Business Strategy or Business Improvement (Bus)

Setting Up the BA Capability

Where in the organisation does the Business Architecture Capability Sit?

Physical:

"Most Business Architecture Practices reside in the IT Function, reporting to the CIO, CTO or another role within that function."

Setting Up the BA Capability

Where in the organisation does the Business Architecture Capability Sit?

Virtual / Matrix: BIZBOK

"A team attempting to build executive support for business architecture could approach an executive steering committee, senior portfolio team or a team of business executives that own the role of strategic planning and transformation"

Setting Up the BA Capability

Where in the Organisation does the BA Capability Sit?

Centre of Excellence

CEO

CFO

BU VP's

COO

Business Strategy & Transformation

CIO

IT Architecture Team

Business Units

Business Architecture COE

Core Participants

Virtual Participants
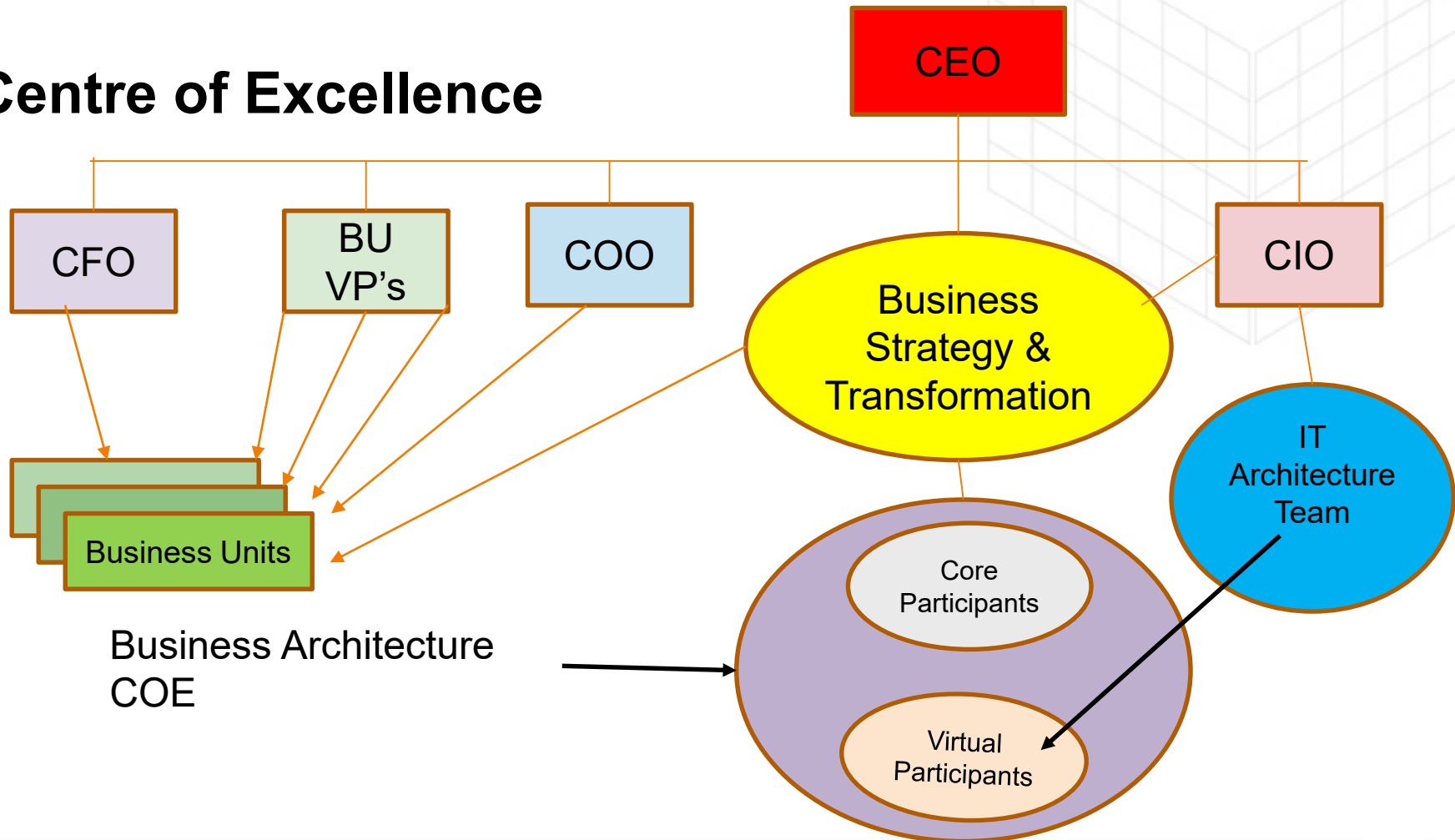
A Centre of Excellence Approach

"The premise for a COE approach for Business Architecture is that it delivers cross-functional, cross-disciplinary transparency to the enterprise and such an endeavour, by definition, requires a central point of collaboration"

Such an approach provides:

- A centralised focal point for best practice adoption, customisation and deployment

- A collaborative rather than command and control approach – the COE is not in a position to dictate policy or solutions, as this is an executive responsibility

- The platform to leverage industry best practices and organisational knowledge to effectively deliver business transparency, support business analysis and planning efforts, and collaborate with all relevant and affected parties as required to deliver bottom line business value.

Options for BA teams …

IT Based Business Architecture Team

- Generally focus on delivering business requirements for funded or planned IT initiatives – flushing out requirements for IT related projects rather than investigating, understanding and providing solutions to business problems.

+++ Strong collaborative relationships with the application and data architects

--- They serve an IT master and not the business and this undermines the very pretext for business architecture.

Options for BA teams …

Business Unit, Business Architecture Team

Typically evolve within a line of business specific division, agency or department.

- Are constrained to working within that department, though they do collaborate with other business units and with IT.

- Approach can offer good value if the business unit is self contained and does not share common customers, partners, capabilities, processes and information with other business units. If it does then its BA will reflect an incomplete and potentially misleading view of the business.

Options for BA teams …

The Free Floating Business Architect

Has no team structure or COE to work through or co-ordinate with and is on their own to service their respective business units.

- This is often the first step to formalising a Business Architecture capability.

- Many of them came from a Business Analysis background and took on the role of Business Architect because of the perceived need for such a role.

- In many instances these folk are used as a one man COE but most are used by managers to research business requirements and co-ordinate with IT on those requirements – in other words they are not Business Architects at all.

Options for BA teams …

The Independent Enterprise Architecture Team

This approach involves moving the entire EA function , with the domain architecture teams, out of IT and out from under the CIO. Such a team would have a Business Architecture COE that reported to a VP of EA

+++ Business Architecture gets to deal with business issues

---- The application, data and technology architects are separated from their home in IT

Options for BA teams …

The Independent Business Architecture COE

This is a team that:

– has horizontal views of the enterprise

– is not beholden to any single business unit or special interest, and

– is independent form the IT organisation

The group collaborates with business unit specific business architects and teams and works very closely with application and data architects from the IT EA team.

The Ideal Business Architecture Organization Structure

- The BA-COE placed in a neutral role, with access to horizontal business requirements and strategies

- It has direct access to execs setting and funding cross functional business issues

- It should have access to BU's through BU specific architectures and to IT through Data and Application architecture teams

The Business Analyst and the Business Architect

A Taste of the Conflict ….

2

Who is the Business Architect

Jeff Scott's (Forrester Research) 6 Competencies for a Busiess Architect

1. A Sound Understanding of Business Principles and Concepts

2. An ability to think about business processes outside the technology context

3. A really strong consulting mindset

4. A Strategic Point of View

5. Good at Design Thinking

6. A Catalyst for Change

Who is the Business Architect

The Business Architects Role

- Whelan identified 4 levels to which Business Architecture can be applied:
  - **Macro:** establishing the vision and desired target state and the benefits the organization brings to its stakeholders.

  - **Strategic:** supplementing the vision with target capabilities, supporting principles and policies and a current state environmental assessment to provide contextual rationale.

  - **Segment/programme:** translating the strategic activities into delivery-focused change initiatives at the segment or programme level.

  - **Project:** engaging with projects to communicate the architecture and oversee alignment to it.

- A Business Architect may operate at one or more of these levels

- Operating at all 4 is unlikely

- All four are required though

Who is the Business Architect

Another Business Oriented View …

"Not every Business Architect requires in depth knowledge of every area."

- Ability to communicate with business professionals and business executives, understand their requirements and help these individuals visualize the rot cause and potential solutions to priority business requirements

- Capacity to help the business assimilate and visualize complex and possibly conflicting information in ways that can hide or expose the details when and where required.

- Knowledge of organisational culture and governance structures needed to adapt and refine business architecture best practices.

- Knowledge of business capability, organisational governance, value stream, business process and business semantic representation needed to facilitate the mapping, aggregation, decomposition and visualization of current and target state views of the business

Who is the Business Architect

Another Business Oriented View …

- Creative capacity to evolve and customise business architecture metrics and visualisations to support value proposition related objectives against performance.

- Ability to customise repository templates needed to establish a business architecture knowledgebase to enable the collection, aggregation and decomposition of business artifacts.

- Capacity to communicate and collaborate with IT application and data architects as required for business and IT mapping, strategic planning and roadmap creation.

- Organisational and governance skills necessary to sustain a viable business architecture capability within the enterprise

Who is the Business Architect

The Business Architect vs The Business Analyst

According to the Business Analysis Body of Knowledge (BABOK®), a Business Analyst is:

"… any person who performs business analysis activities, no matter what their job title or organizational role may be. Business analysis practitioners include not only people with the job title of business analyst, but may also include business systems analysts, systems analysts, requirements engineers, process analysts, product managers, product owners, enterprise analysts, business architects, management consultants, or any other person who performs the tasks described in the BABOK® Guide, including those who also perform related disciplines such as project management, software development, quality assurance, and interaction design."1

In other words, regardless of title, if you are doing business analysis, you are a Business Analyst.

Who is the Business Architect

The Business Architect vs The Business Analyst

"The difference between the business architect and the business analyst is a matter of intent, breadth of coverage, disciplines employed and on-the-ground realities"

In practice, generally, Business Analysts

- Rarely leverage architectural disciplines
- Typically have business unit or divisional constraints on their domain of analysis
- Focus on gathering and developing requirements for IT

That said, generally you need all three disciplines – Business Architects, Business Analysts and IT Architects (Solution, Information and Technology)

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A View From the Trenches …..

- The role of Business Architect (or, in fact, any other form of Enterprise Architect) is not a simple extension to the role of Business Analyst.

- Becoming a fully-certified Business Architect requires significant re-skilling.

- Blurring the lines between the roles of Business Architect and Business Analyst can create a world of confusion for organisations, as they embark on their journey towards digitisation, and develop their EA practices (often driven by IT governance requirements).

- Conflating or confusing the two domains also often results in politics and turf wars - wasting resources and detailing transformation efforts.

A View from the Trenches …

A Review from 3 Perspectives:

1. They have fundamentally different mandate

   - The Business Architect will support organisational change leaders at the strategic level
   - The Business Analyst are typically more project or solutions oriented

2. They have a different scope of work

   - Business Architects focus their activities on creating the principles, the standards, the architecture frameworks, and the business and technology reference models.
   - This then filters down in the scope of the Business Analyst, who will take these artefacts and translate them into specific projects.

A View from the Trenches …

A Review from 3 Perspectives:

3. They have different certifications, accreditations and skill-sets

    – Accomplished Business Architects need to have very specific accreditation in Enterprise Architecture frameworks, techniques, and tools – such as TOGAF, ArchiMate, or Open Certified Architect, for example.

    – To complement these formal qualifications, Business Architects are strategically-minded, have sharp business acumen, and generally have well-developed leadership and executive engagement skills.

    – Business Analysts – on the other hand – dive deeper into the technical aspects of IT tools and systems, and generally have strong analytical capabilities, communication skills, and project management experience.

![realIRM logo]

BA Engagement Models?

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Setting Up the BA Capability

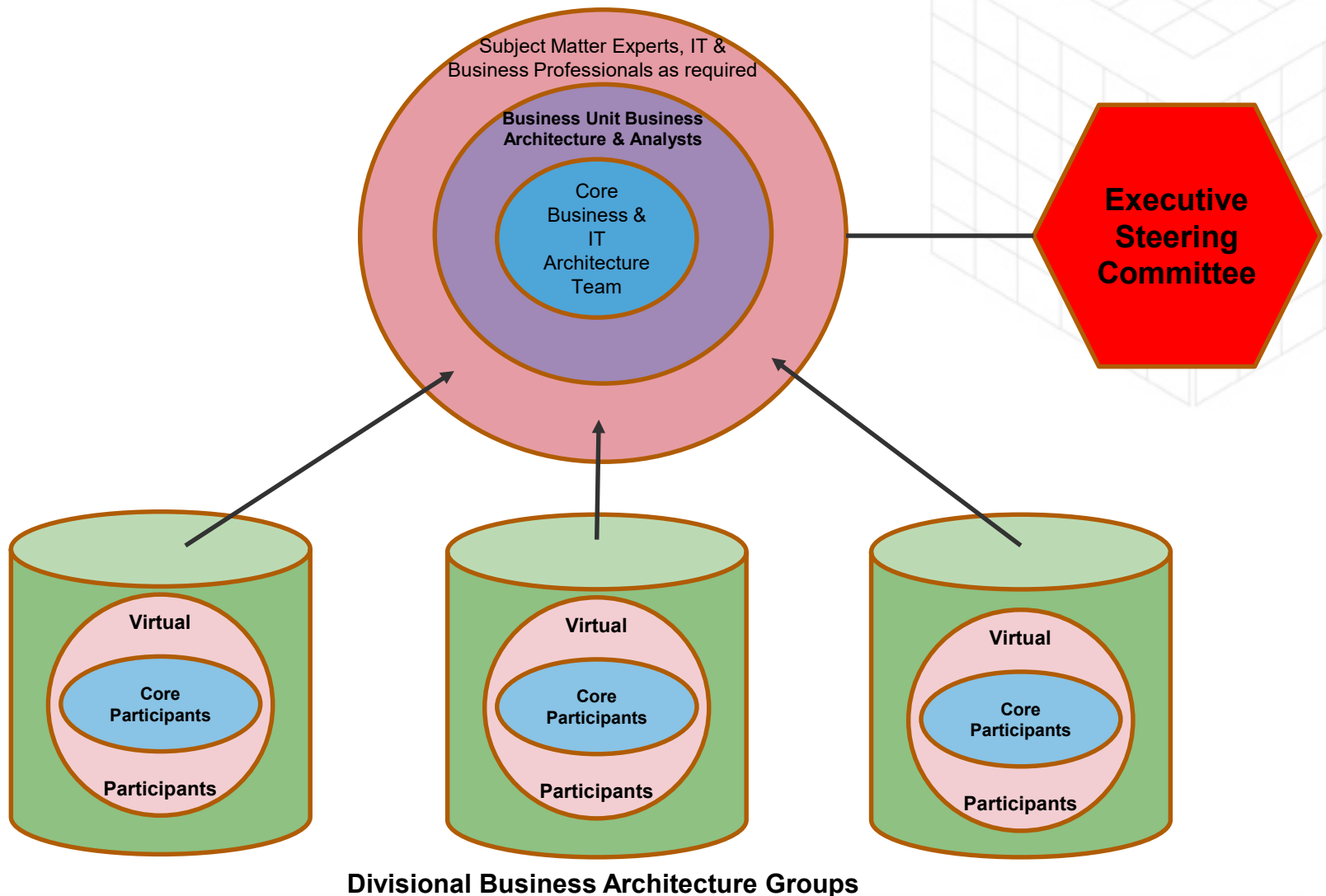So we want to set up an Architecture Practice ,,,,,

6. Establish a sustainable proposition.

Business architecture should be part of the fabric of the organisation, part of the fabric of the change process – not an independent process; not a once off process.

Therefore:

- Embed business architecture into the delivery mechanisms – downstream

- Embed business architecture into business planning mechanisms – upstream

Engagement Models and Deployment Teams

Subject Matter Experts, IT & Business Professionals as required

Business Unit Business Architecture & Analysts

Core Business & IT Architecture Team

Executive Steering Committee

Virtual

Core Participants

Participants

Virtual

Core Participants

Participants

Virtual

Core Participants

Participants

Divisional Business Architecture Groups

Setting Up the BA Capability

In closing ….

- Business architecture is a new discipline and the risk of failure is high

- There is a great need to adopt a value delivery mind set, to ensure successful execution.

- Business architecture is not to be practiced in isolation – it needs to be woven into the fabric of the organisation.

- This requires overcoming the barriers referred to above.

- Business architects need to establish and deliver on a set of engagement principles

The End

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