Objectives

- Introduce The Open Group Architecture Framework (TOGAF®)
  - Architecture Development Method (ADM)
- Review of activities in Phase B: Business Architecture
  - Describe baseline (or as-is) and target (or to-be) business architecture
- Identify business architecture stakeholders
  - Understand concerns they have
  - Which business architecture viewpoints (and in which forms) will be used to demonstrate their concerns have been addressed
- Review TOGAF Architecture Content Metamodel
  - Discuss elements used for business architecture (organization units, business processes, functions, actors, business services, etc)
- Review examples of business architecture deliverables built using commercially available modeling tools
About APG

- APG’s mission is to
  “Align information technology and systems engineering capabilities with business strategy using proven, practical processes delivering world-class results.”

- Industry thought leader in enterprise architecture, business modeling, process improvement, systems and software engineering, requirements management, and agile methods

- Member and contributor to
  - UML, SysML, BPMN, UPDM at the Object Management Group (OMG)
  - TOGAF and ArchiMate at The Open Group
  - Eclipse Process Framework (EPF) at the Eclipse Foundation

- IBM Advanced Business Partner

- Sparx Systems Value-Added Reseller
Understand What Motivates the Business

- What is the mission and vision?
- What are the current business goals and objectives?
- Are objectives quantified and measurable?
- What external and internal factors are driving the business?
- What constraints govern motivation?
- What policies influence culture?
- Are these motivation factors prioritized and co-related?
Understand How the Business Behaves

- Who are your customers, suppliers, and partners?
- What are your externally facing business services?
- What external events must your business respond to?
- How do people and systems internally collaborate to fulfill external requests?
- What security and regulatory policies govern behavior?
Understand How the Business Fits Together

- What are your internal capabilities?
- How does one business process integrate with another? Where are the handoffs and touch points?
- What data is shared between business processes?
- How is the business organized?
- Who “owns” particular business processes?
- Who “stewards” common data?
What Does Enterprise Architecture Provide?

• “The primary reason for developing an enterprise architecture is to support the business…this makes IT a responsive asset for a successful modern business strategy…”
  – The Open Group Architecture Framework (TOGAF)

• An enterprise architecture provides a **strategic context** for the evolution of both business and IT systems
  - Enable rapid adaptation to continual changes in business and technology

• A “**good**” enterprise architecture enables you to achieve the right balance between IT efficiency and business innovation
  - Allows individual business units to **innovate** safely in their pursuit of competitive advantage
  - Enables **synergy** across extended enterprise through an integrated business-IT strategy
Enterprise Architecture Capabilities

General Business Capabilities Supporting an Architecture Practice
- Architecture Team Leadership & Direction
- Performance Measurement
- Team Management
- Risk Management
- Enterprise Engagement & Enrollment

Architecture at the Strategy and Portfolio Management Level
- Architecture-Led Enterprise Strategy Development
- Architecture Support for Business and IT Strategy definition
- Architecture Road-Mapping

Architecture at the Program Level
- Architecture Supported Program Inception
- Architectural Governance and Issue Management

Architecture at the Project Level
- Architecture Budgeting & Estimation (Effort & Cost)
- Solution Architecture
- Project Assurance

Using Architecture to Manage Third Party Contractors
- Architecture Supported Procurement
- Architecture Supported Contractor Governance
- Contractor Collaboration and Integration Management

Foundational Architecture Capabilities
- Architecture Standards & Reference Models
- Architecture Deliverable Standardization
- Architecture Infrastructure & Tools Standardization
- Knowledge Management for Architecture Products
- Configuration Management of Architecture Products

“World-Class Architecture” – The Open Group
Enterprise Architecture Domains

- **Business Architecture**
  - Business services, processes, events
  - Business systems, capabilities, functions

- **Data Architecture**
  - Business domains, entities, data elements
  - Data requirements, relationships

- **Application Architecture**
  - Portfolios, applications, subsystems
  - Interfaces, integration

- **Technology Architecture**
  - Hardware and software platforms
  - Network and communications infrastructure

**Context:** Business drivers, regulations, security, service levels

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BBC 2013 – Developing Business Architecture with TOGAF
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The Open Group Architecture Framework (TOGAF)

- Framework for developing an enterprise architecture
  - May be used freely by any organization for internal use
- Contains the three key elements of any enterprise architecture framework
  - A taxonomy of the deliverables that the architecting activity should produce
  - A description of the method used to develop the architecture
  - Definition of skills required by architecture participants
- Designed to complement other taxonomies
- The Architecture Forum develops successive versions of TOGAF on an ongoing basis
  - Have quarterly member meetings in US and abroad
  - Active workgroups collaborate regularly between meetings
Architecture Practice Framework

Method Framework
- Description of how architecture work is initiated, performed, governed
- Integration with other business and IT lifecycles and processes

Skills Framework
- Description of skills and experiences required by architecture participants
- Includes professional development and certification programs

Taxonomy Framework
- Definition of relevant types of architectural assets and their relationships
- Often includes various reference models

Tools Framework
- Suite of integrated tools, aligned with method, that implements taxonomy
- Includes modeling, requirements management, repositories, governance
Architecture Development Method (ADM)

- Provides **tested and repeatable** process for developing architectures
- Includes activities for
  - **Establishing** an architecture framework
  - **Developing** architecture content
  - **Transitioning and governing** the realization of architectures
- Carried out within an **iterative cycle** of continuous architecture definition and realization
- Allows organizations to **transform** their enterprises in a controlled manner in response to business goals and opportunities
Phase B: Business Architecture – Objectives

- Develop **Target Business** Architecture that describes how enterprise needs to
  - *Operate* to achieve business goals
  - *Respond* to the strategic drivers set out in Architecture Vision
  - That addresses Request for Architecture Work and **stakeholder concerns**
- Identify **candidate** Architecture Roadmap **components**
  - Based upon **gaps** between the **Baseline** and **Target** Business Architectures
Architecture Description Steps

1. Select Reference Models, Viewpoints, and Tools
2. Develop Baseline Architecture Description
3. Develop Target Architecture Description
4. Perform Gap Analysis
5. Define Candidate Roadmap Components
6. Resolve Impacts Across the Architecture Landscape
7. Conduct Formal Stakeholder Review
8. Finalize the Architecture
9. Create Architecture Definition Document
#1: Select Reference Models, Viewpoints, and Tools

- Select relevant Business Architecture resources (reference models, patterns, etc.) from architecture repository
  - Based on business drivers, stakeholders and concerns

### Building block catalogs
- Organization/Actor
- Driver/Goal/Objective
- Role
- Business Service/Function
- Location
- Process/Event/Control/Product
- Contract/Measure

### Matrices
- Business interaction matrix
- Actor/role matrix

### Diagrams
- Business Footprint
- Business Service/Information
- Functional Decomposition
- Goal/Objective/Service
- Use-case
- Organization Decomposition
- Process Flow
- Events
New to 42010:
- Architecture Framework
- Architecture Decision
- Correspondence Rule
TOGAF Architecture Viewpoints

Three types of viewpoints:
- Catalogs (lists)
- Matrices
- Diagrams
#2 & #3: Develop Architecture Descriptions

- Develop *baseline* description of existing business architecture
  - To extent necessary to support *target* business architecture
- Scope and level of detail depend on
  - Extent to which existing business elements are likely to be carried over into target business architecture
- Develop *target* description of future business architecture
  - To extent necessary to support *architecture vision*
- Scope and level of detail depend on
  - Relevance of business elements to attaining architecture vision
- Whether architecture descriptions *exist* in architecture repository will significantly influence how easy this is to do
#4: Perform Gap Analysis

- **Verify** architecture models for internal consistency and accuracy
  - Perform *trade-off* analysis to resolve conflicts among different views
  - Validate that models support *principles*, objectives, and constraints
  - Document *changes* to selected models in architecture repository
  - *Test* architecture models for completeness against requirements

- Identify **gaps** between baseline and target
  - Create gap matrix
  - Identify building blocks to be *carried over*, classifying as either changed or unchanged
  - Identify *eliminated* building blocks
  - Identify *new* building blocks
  - Identify gaps and classify as those that should be *developed* and those that should be *procured*
#5: Define Candidate Roadmap Components

- Business architecture roadmap is required to **prioritize** activities over coming phases
  - Following gap analysis of baseline and target architectures
- Make **initial selections** of grouping business architecture building blocks for migration planning
  - Build initial architecture roadmap **incrementally** across architecture description phases
- Initial business architecture roadmap used as **raw material** to support more detailed definition of a consolidated, cross-discipline roadmap within Opportunities & Solutions phase
Review Example
Business Architecture Views
Thanks for your attention and participation!