UML® Profile for BIZBOK®
“Modeling for Everyone”

Global IASA eSummit
24 May 2017

Armstrong Process Group, Inc.
www.aprocessgroup.com
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®, SPEM, UPDM™/UAF, BAMM at OMG®
  - TOGAF, ArchiMate®, IT4IT™ at The Open Group
  - UML Profile and Metamodel teams at Business Architecture Guild
- Business partners with Sparx, HP, and IBM
- Open Group Accredited Training Provider, Guild Accredited Training Partner™, IIBA® Endorsed Education Provider (EEP™)
• Blueprints provide views into knowledgebase, based on stakeholder concerns
• Scenarios contextualize expected outcomes of business architecture work
  • Also inform initial selections of key stakeholders and likely concerns
Value Proposition

- Uplift professionalism of practitioners
  - Transition from office productivity tools to formal modeling solutions
- Increase adoption of BIZBOK-based modeling
  - Diminish requirement of end-users to create one-off custom solutions
- Provide foundation for end-user metamodel customization
  - Enable end-users to add custom properties and additional types of elements, relationships, and diagrams
- Allow integration of Business Architecture models with other models
  - Enterprise architecture (TOGAF, ArchiMate, UPDM/UAF)
  - Business process (BPMN)
  - Systems engineering (SysML)
  - Solution delivery (UML)
What Are We Building?

• **UML Profile**
  - Define base metatypes, metadata, and metarelationships
  - Make “open-source” to allow for end-user customization
  - Would allow end-user to create own MDG Add-In based on Profile or MDG Tech

• **MDG Technology**
  - Includes UML profile
  - New diagram types with specific toolboxes
  - Scripts, report templates, other stuff
  - Could also be open-sourced

• **MDG Add-In**
  - Create .NET assembly using C# or VB.NET
  - Add new windows/views that do special things
  - Catch EA GUI events and respond accordingly
COLLABORATION TEAMS: UML PROFILE FOR BIZBOK® GUIDE

News
- MDG Technology v1.0 Beta released!
- MDG Technology features
- Next meeting @ 22 Nov 2016
- View group calendar

Web Published Models
Last published 4 Nov 2016.
- Metamodel
- MDG Technology

Content
- Meeting minutes
- Model content
- UML Profile
- MDG Technology
- Guidance

Team Tools
- Connect to EA cloud repository to view model
- Login into Hosted Redmine to view issues

Team Members
- APG
- AIMCo
- FedEx
- Guild Metamodel
- OMG BAMM RFP
Custom metaclass properties (like "isActive" for Class metaclass) are those assigned by Sparx by default. If a non-default value is selected, there will be a specific note about the rationale for a different setting.
UML Profile – Capability Relationships

- **Composition**
  - _metatype = composedOf
  - _strictness = profile
  - direction: Direction = Source -> Destination

- **Dependency**
  - _metatype = dependsUpon
  - _strictness = profile
  - direction: Direction = Destination -> ...

- **Instantiation**
  - _metatype = instanceOf
  - _strictness = profile
  - direction: Direction = Destination -> ...

- **Association**
  - _metatype = produces
  - _strictness = profile
  - compositionKind: CompositionKind = none
  - direction: Direction = Destination -> ...

- **Association**
  - _metatype = requires
  - _strictness = profile
  - compositionKind: CompositionKind = none
  - direction: Direction = Destination -> ...
Capability Mapping – Diagram Types

Change Diagram Type

- Package: Value Streams
- Diagram: Deliver Training Engagement - Value Items

Type

Select From:
- UML Structural
- UML Behavioral
- Extended
- BIZBOK Capability Mapping
- BIZBOK Information Mapping
- BIZBOK Organization Mapping
- BIZBOK Value Mapping
- BPMN 2.0
- FEAU Diagrams
- SPEM
- TOGAF Diagrams
- TOGAF_BusinessArchitecture
- TOGAF_DataArchitecture

Diagram Types:
- Capability Cross Mapping
- Capability Map

OK  Cancel  Help
Capability Map – Auto-Generated

Toolbox

Elements
- Capability
- Outcome

Relationships
- Composed Of
- Depends Upon
- Enables
- Informs
- Instance Of
- Possesses
- Produces
- Requires

Common
Artifacts

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Value – Metamodel

Value Proposition
- desires
- informs
- delivers

Stakeholder

Strategy
- aligns with

Initiative
- impacts

Value Stream
- composed of
- {ordered}

Value Stream Stage
- triggers
- supports
- enables

Policy
- governs

Product
- relies on

Capability
- enables
Value Mapping – Diagram Types

Change Diagram Type

Package: Value Streams
Diagram: Deliver Training Engagement - Value Items

Type

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Diagram Types:
- Value Map
- Value Stream Specification
- Value Cross Mapping
Value Map – Example

Customer «triggers»

«desires»

Uplifted Workforce Capabilities «delivers»

Train Workforce

Understand Training Requirements
Arrange Training Logistics
Register for Training Session
Deliver Training Session

Value Streams: Train Workforce - Value Stream Stages
Value Streams: Train Workforce - Value Items
Value Streams: Train Workforce - Capabilities
Value Stream Specification

<table>
<thead>
<tr>
<th>:Customer</th>
<th>:Training Facility</th>
<th>:Student</th>
<th>:Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand Training Requirements</td>
<td>Arrange Training Logistics</td>
<td>Register for Training Session</td>
<td>Deliver Training Session</td>
</tr>
<tr>
<td>Clear Customer Expectations</td>
<td>Appropriate Facilities</td>
<td>Defined Target Audience</td>
<td>Improved Professional Skills</td>
</tr>
</tbody>
</table>

Uplifted Workforce Capabilities
Value Cross-Mapping

Understand Training Requirements
- Client Management
- Proposal Management
- Quote Management
- Service Sales

Arrange Training Logistics
- Event Management
- Facility Management
- Instructor Management

Register for Training Session
- Event Management
- Event Registration

Deliver Training Session
- Event Management
- Event Preparation

Close Training Session
- Attendee Management
- Instructor Management
- Quote Management
- Service Sales

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Information Map – Diagram Types

Change Diagram Type

Package: Event Management

Diagram: Event Management Business Entities

Type

Select From:
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Diagram Types:
- Information Cross Mapping
- Information Lifecycle
- Information Map

BIZBOK Information Mapping

OK Cancel Help
Information Map – Example

- Event
  - Statement of Work
  - Event Registration
  - Attendee
    - Student
  - Event Attendance
  - Course Evaluation
  - Training Session

Toolbox:
- Information
  - Information Concept
  - Info Concept Instance
  - Info Concept State
  - Distinguished Business Object
- Cross Mapping
  - Capability
  - Outcome
  - Value Item
  - Value Stream Criteria
  - Value Stream Stage
- Relationships
  - Applies To
  - Describes
  - Informs
  - Represents
  - Uses
- Common
- Artifacts

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Value Stream – Entry/Exit Criteria

:Proposal [Submitted]
Understand Training Requirements
:Statement of Work [Approved]

:Event [Scheduled]
Arrange Training Logistics

:Register for Training Session
:Course Evaluation [Returned]

:Event [Delivered]
Deliver Training Session
:Certificate of Completion [Provided]

:Proposal
:Event
:Register for Training Session
:Event
:Event
:Event
### Value Stream Stage / Information Objects Mapping

<table>
<thead>
<tr>
<th>Source</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Certificate of Completion</em></td>
</tr>
<tr>
<td>Arrange Training Logistics</td>
<td>![Box]</td>
</tr>
<tr>
<td>Close Training Session</td>
<td>![Box]</td>
</tr>
<tr>
<td>Deliver Training Session</td>
<td>![Box]</td>
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<tr>
<td>Register for Training Session</td>
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<tr>
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<tr>
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</tbody>
</table>

### Value Stream Stage

- **Value Stream Stage has Entry/Exit Criteria**

  **(Information Concepts)**

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<tr>
<td></td>
<td><em>Accounts Payable</em></td>
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### Value Stream Stage enabled by Capability
Conclusions

- UML Profile for BIZBOK should increase level of adoption of formal modeling in Business Architecture
- Have released first alpha version focusing on core, foundational domains
  - Capability, Value, Information, Organization
  - Plan to release beta version by beginning of June 2017
- Have finished metamodel for extension domains
  - Strategy, Initiative, Stakeholder, Product, Policy
  - Will begin implementing UML profile in June
- Looking for end-users to test work-in-progress
  - Also looking for people to help contribute to development
- Plan to release first complete version 3Q2017
Q&A

Thanks for your attention and participation!

chris.armstrong@aprocessgroup.com
http://www.aprocessgroup.com
http://www.linkedin.com/in/togaf/

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