The Enterprise Architecture Body of Knowledge (EABOK®)

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Agenda

- Overview of the EABOK®
  - Sheila Cane, The MITRE Corporation
- The changing nature of the dissemination of research
  - Richard McCarthy, Quinnipiac University
- Example of EABOK Content: Defining EA Value
  - Neil Efrom, The MITRE Corporation
- Request for engagement
  - Con Kenney, National Defense University
Membership Info Packet

- Product Charter
- Consortium agreement
- Bylaws
- CONOPS

We’re live tweeting this meeting
Follow us @eabok
Tweet and re-tweet to get people talking!
EABOK Vision

- **EA: From frameworks to strategy**
  - Evolving Practice
  - Evolving Vocabulary

- **EABOK: From document to knowledge**

- **EABOK: A collection of ready-to-use knowledge about enterprise architecture (EA)**

- **Practical knowledge about EA**
  - Terms and Concepts
  - EA Standards and Practices
  - EA Methods and Patterns
  - EA Perspectives

- **International collaboration with Govt, Academia, Industry**

- **Agile: start small, evaluate, adapt and evolve**
What Makes EABOK Unique?
What Makes EABOK Unique?

- EABOK exposes practitioners—from novices to experts—to two knowledge types:
  - Webpages that provide a summary of each topic
  - Papers and other content that offer a single perspective within the topic
What Makes EABOK Unique?

It embraces diverse EA perspectives and experiences.
EABOK
Board of Governors

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Mr. Con Kenney, National Defense University

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Dr. Richard McCarthy, Quinnipiac University, President IACIS, JCIS Editorial Review Board

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Interested in becoming a member of the Editorial Review Board?

Email Duane Hybertson: dhyberts@mitre.org
Achievements

- Began development in MITRE – 2012
- Outreach presentations
  - Oct ’12: International Association of Computer Information Systems, Myrtle Beach, SC
  - Oct ’12 Penn State Center for Enterprise Architecture, Philadelphia, PA
  - Nov ‘12 Federation of Enterprise Architecture Professional Organizations, Ft Lauderdale, FL
  - Nov ‘12 Gov EA conference, Washington, DC: Session presentation and vendor booth
  - Aug ’13 Invited speaker at Nordic EA Summer School Conference, Helsinki, Finland
- Initial Governance Board Workshop - May 2013
- 2\textsuperscript{nd} Board meeting – Nov 2013
- Public Launch - Nov 2013
- Twitter account initiated – Nov 2013 – 144 followers and growing
- EABOK Community Workshop – March 2014
- 19 total submissions: 15 approved; 2 in review
The Changing Nature of the Dissemination of Research

Richard McCarthy
Quinnipiac University
richard.mccarthy@quinnipica.edu
History

- There have been open access journals since the dawn of the Internet Civilization [1980’s]
- Including 1 that was related to information technology: The Public Access Computer Systems Review
Impact

- The impact of any research article is the extent to which it is read.
- Impact is typically measured by the extent to which it is cited by others (some citation indexes measure downloads as well).
- There are over 24,000 academic journals worldwide; about 1,000 of them are related to information technology. Most libraries cannot afford to subscribe to all of them leading to the journal of affordability problem.
Open Scholarship – A Worldwide Initiative

- Since 2007 members of EnablingOpenScholarship has been meeting to further the support for open access to all research in the field of information technology.
- The Open Society Institute, a foundation of philanthropists, has provided funding to help support open journal access organizations.
Gold Route – Green Route

- Gold Route – is the publication of fully open journals (or websites)
- Green Route – self archiving in a repository
The Changing Face of Research - Open Access Journals

- An Open Access Journal is a scholarly journal that is available online without substantial barriers to the reader.
- There are generally two types: Subsidized Payment to Author/Journal
- Subsidized journals come from academic institutions, academic associations, or a government information center/grant
- There are also hybrid models that support some variations of the basic structure.
Example of EABOK Content: Defining EA Value

Neil Efrom
The MITRE Corporation
nefrom@mitre.org
An approach to defining enterprise architecture value within an Organization

Submitted to EA BoK
January 4, 2014

Stuart Lesley
Neil Efrem

MITRE Approved for Public Release
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Section 1: Overview

Organizations are facing increasing demands to demonstrate the value of their EA programs in a more data driven way. Due to the enterprise nature of EA programs, it is difficult to gather the appropriate data in a timely manner. Many of the “payoffs” of EA either require years to become apparent or span multiple programs/projects. This presentation provides one approach an organization can use to better measure EA value in a data driven manner and is divided into the following sections:

- Section 1: This overview
- Section 2: The proposed approach
- Section 3: Reference and Backup Material
The Challenge

- **Determining the value** of Enterprise Architecture has proven to be difficult.
  - Output measures are not easily linked to the determination of the value of EA.
  - Links between EA products and actions taken based on those products can be hard to establish.

- **Industry trends** with respect to measures and measurements of enterprise architecture are moving from output measures to **outcome measures**.

- It is no longer sufficient to only show how EA affects specific outputs (numbers of reports created, number of processes documented, etc.), but to also show the **results** that the use of enterprise architecture has on **outcomes** such as positive differences gained by the end users of government products and services.

**Outputs** are the direct products of program activities and may include types, levels and targets of services to be delivered by the program.

**Outcomes** are the specific changes in program participants’ behavior, knowledge, skills, status and level of functioning.
The Opportunity

- **Give the EA customer what they want and need**
  - Position the Enterprise Architecture organization to provide a set of offerings tailored for the specific needs of the EA program customers and the overall needs of the organization.

- **Communicate with the customer through meaningful measures**
  - Utilize meaningful measures and measurements for each EA offering and include identification of expected values of the measurement to say this is good, neutral, or bad.
Section 2: Proposed Approach

- **Determine organization horizon**
  - Determine EA program outcomes that support outcomes and identify EA Offerings to support the EA and organization desired outcomes – illustrated via line of sight or other mechanism that can demonstrate alignment of outputs, offerings and outcomes.

- **Identify objectives for EA and select relevant measures**
  - Perform stakeholder analysis to identify who in the organization would be interested in EA offerings (products and services) from the EA program.
  - Create EA offering agreement with each customer to include:
    - Specific details regarding the product or service
    - Measures and acceptable measurements
    - How the customer organization is using the products and services to impact EA program and organization desired outcomes.

- **Start Tracking**
  - Collect and compile EA program outcome and organization outcome measures to illustrate value of EA program and share via dashboards, reports, and other mechanisms.

- **Adjust the EA Program**
  - Over time, prioritize the EA Offerings that have the greatest value to the organization.
Example Line of Sight

Line of Sight View Can Reveal New Relationships and Outputs

*Many Outputs often map to one outcome*
Sample EA Offering Measures

- **Quality Measures**
  - Degree of Completeness
  - Level of Currency
  - Timeliness
  - Accuracy
  - Consistency

- **Usefulness Measures**
  - Validity/Effectiveness
  - Customer Satisfaction
  - Level of Utilization
  - Usability

- **Cost/Quantity Measures**
  - Quantity Produced
  - Cost of Producing EA Offering

Example EA Offering:
“Systems mapped to Business Functions Report”

Potential Measures:
- Degree of Completeness
- Level of Currency
- Accuracy
- Customer Satisfaction
Sample organization Outcome Measures

- **Cost Reduction**
  - Reduction in Cost of IT Implementation
  - Reduction in Cost of IT Operations
  - Reduction in Cost of IT Maintenance
  - Reduction in Cost of IT Enhancements
  - Reduction in Cost of IT Integration

- **Implementation Time Reduction**
  - Decrease in Time to Implement IT Functionality
  - Decrease in Time to Implement IT Enhancements

- **Quality Improvement**
  - Increase in Quality of IT Implementation
  - Increase in Quality of IT Operations
  - Increase in Quality of IT Maintenance
  - Increase in Quality of IT Enhancements
  - Increase in Quality of IT Integration

- **Risk Reduction**
  - Risk Reduction

Example: organization Outcome Measures that could be associated with the EA Offering “Systems mapped to Business Functions Report”
- Reduction in Cost of IT Operations
- Reduction in Cost of IT Maintenance
- Risk Reduction
EA Offering Agreement Provides Link Between EA Offerings and Organization Outcomes

Offering Agreement Includes:

- Details regarding the product or service
- Measures and acceptable measurements
- How the customer organization is using EA Offering
Section 3: Reference and Backup Material

References:

- Federal Enterprise Framework version 2 from January 29th, 2013. Listed on OMB MAX.  
  https://max.omb.gov/community/download/attachments/654807556/FEAF+v2.pdf?version=3&modificationDate=1360702682206

- DoDAF version 2.02.  

- Full version of this presentation on the EA BoK  
# EA Offerings Sample Listing (Partial)

<table>
<thead>
<tr>
<th>EA Offering (Product or Service)*</th>
<th>FEA Artifact</th>
<th>DoDAF/Other Artifact</th>
<th>Artifact Description</th>
<th>Offering/Service Type</th>
<th>Provided, Hosted, or N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Interface Diagram</td>
<td>A-1</td>
<td>SV-1</td>
<td>The identification of application resource flows and their composition</td>
<td>Report</td>
<td>Provided</td>
</tr>
<tr>
<td>Application Communication Diagram</td>
<td>A-2</td>
<td>SvcV-2</td>
<td>The means by which resource flows between applications occur</td>
<td>Report</td>
<td>Provided</td>
</tr>
<tr>
<td>Application Interface Matrix</td>
<td>A-3</td>
<td>SV-3</td>
<td>The interface relationships among systems</td>
<td>Report</td>
<td>Provided</td>
</tr>
<tr>
<td>Application Data Exchange Matrix</td>
<td>A-4</td>
<td>SV/SvcV-6</td>
<td>The details of resource flows among systems; the activities performed; the resources exchanged; and the attributes (rules and measures) associated with these exchanges</td>
<td>Report</td>
<td>Hosted</td>
</tr>
<tr>
<td>Application Service Matrix</td>
<td>A-5</td>
<td>SvcV-3a&amp;b</td>
<td>Interface relationships between services and applications</td>
<td>Report</td>
<td>Provided</td>
</tr>
<tr>
<td>Application Performance Matrix</td>
<td>A-6</td>
<td>SV/SvcV-7</td>
<td>The measures (metrics) of applications</td>
<td>Report</td>
<td>Provided</td>
</tr>
</tbody>
</table>

* List developed from EA Products from the Federal Enterprise Framework version 2, dated January 29th, 2013, DoDAF version 2.02, FSAM, and other widely accepted practices.
# SLA Sample Template

## General Information

<table>
<thead>
<tr>
<th>EA Offering Agreement Title</th>
<th>Title of the agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Organization</td>
<td>Name of customer organization</td>
</tr>
<tr>
<td>Customer Point of Contact</td>
<td>Name of contact at customer organization</td>
</tr>
<tr>
<td>Customer Contact Information</td>
<td>Contact information to include email, phone, etc.</td>
</tr>
<tr>
<td>Start Date</td>
<td>Date the agreement starts</td>
</tr>
<tr>
<td>End Date</td>
<td>Date the agreement ends</td>
</tr>
</tbody>
</table>

## EA Offering Details

<table>
<thead>
<tr>
<th>EA Offering Description</th>
<th>Name of the EA Offering(s) being requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Frame</td>
<td>Describes the period of time requested for the offering</td>
</tr>
<tr>
<td>Frequency</td>
<td>Identifies the delivery schedule - how often and when the offering is requested by Customer (e.g. - would like a report available 24x7 on EA's web site)</td>
</tr>
<tr>
<td>Degree of Completeness</td>
<td>Identifies the specific set of information that is needed to be within its scope.</td>
</tr>
<tr>
<td>Level of Currency</td>
<td>Identifies how often the offering needs to be updated (e.g. - would like an updated version based on information captured as of last month)</td>
</tr>
<tr>
<td>Response Times</td>
<td>Identifies expected turn-around times for acknowledgement of request and then specific requests.</td>
</tr>
<tr>
<td>Consistency</td>
<td>Identifies expected level of consistency</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Identifies expected level of accuracy</td>
</tr>
<tr>
<td>Granularity</td>
<td>The level of detail required for the measure</td>
</tr>
</tbody>
</table>

## EA Offering Usage Information

| List of Business Decisions that use Offering | Identifies the specific set of business decisions that the EA Offering supports |
| Customer Satisfaction                      | Identifies the factors that the Customer will use in defining satisfaction with EA Offering (timeliness, consistency, accuracy, and other factors relevant to the needs of the customer) |
| How Often is the EA Offering Used?         | Identifies how often the Customer plans on using the EA Offering |
| Agency Desired Outcome(s)                  | Identifies which Agency identified outcomes that this EA Offering is used to support. |
| Agency Desired Outcome(s) Measures         | Identifies the measures that are used to monitor the Agency Desired Outcome (Could be from the PAR, IT Spending Dashboard, Internal Agency source, etc.) |
Request for Engagement

Con Kenney
NDU iCollege
con.kenney@ndu.edu
Way Forward

- We hope to expand content, broaden outreach, and become a peer reviewed forum.

- We need your participation and contributions to advance the profession.

- Our next community workshop is April 29-30, 2015, MITRE Corporation, and we’d be delighted if you can join us.
How Can You Participate?

- **Become an EABOK Contributor**
  - Visit [www.eabok.org](http://www.eabok.org)
    - Select *Contribute* and follow directions to submit material for EABOK

- **Become an EABOK Consortium Member**
  - Panel of Advisors Member
  - Editorial Review Board Member

- **For more information, visit** [www.eabok.org](http://www.eabok.org) or email us at [eabok@mitre.org](mailto:eabok@mitre.org)

- **Follow us @eabok on Twitter**

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Questions for Discussion

- What kind of information about EA practice would you find useful?
- How should that information be organized to make it more useful?
- What kind of information would you like to contribute to the EABOK?
- Do you have any other suggestions you’d like us to consider?
Presenter’s Contact Info

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