EA for SMB

Jim Phelps
Director of Enterprise Architecture & Strategy
Undergraduate Advising @Madison
Division of time in an advising appointment

Current State
- Navigating systems to perform a task
- Teaching students how to use the systems
- High-value advising

Desired Future State
- Perform a task
- Teaching students
- High-value advising
3,000 hours
Focus of EA

Aligning business and IT vision and strategies, delivering strategic business value and enabling a major business transformation.

- Betsy Burton, VP Distinguished Analyst, Gartner
Best and Worst Practices in Enterprise & Application Architecture. 29 August 2013
Creating Future Viability:

**Agility** - our quickness to respond

**Adaptability** - our ability to bring in new things

**Efficiency** - strategic use of limited resource

**Transparency** - connections and resourcing with **Appropriate Risk** management
Metadata Management @UW
Drivers

HR/P Intersections project

Finance Modernization

EDW, BI, Integration Platform, Planning and Budget Database Retirement and many others
## Business Outcomes

Data custodians create access policies once and they are enforced everywhere.

Data custodians can easily update and review their metadata for their core data.

Metadata management is in practice in a common way among distributed groups in a common repository.

Custodians can easily understand where their data is exposed and the security models for the data.

Core enterprise data is consistent across various access methods and views.

Consumers can easily discover how and where they can access and consume core enterprise data.

Consumers know how to get training and help with metadata best practices.

Consumers trust and understand the lineage and quality of data in various sources.

## Success Measures

- Deploy a Metadata Repository for core HR/P data with 80% of definitions complete.
- Training completed for X customers.
- X% of business customers come to the repository for their metadata needs.
- Definition, analysis of the impact and roadmap for the Semantic DAC.
- Clearly defined and designed Metadata data management service(s).
- Assessment against a maturity model showing improvement.

## Initiatives

- Metadata Knowledge Navigator
- Megatron - EIP Transform Engine
- Metadata Training/Communication
- Uniform Security Management: Semantic DAC
- Expanding DAC/SMAT to cover API access
- Rationalize Metadata Repositories

## Core Capabilities

<table>
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<tr>
<th>Metadata Strategy</th>
<th>Core Capabilities</th>
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## Supporting Capabilities

- Metadata management tools
- Metadata capture best practices
- Data classification practices
- Program management
- Communication and Outreach

## Management Questions

Is Metadata Management an initiative? No. It is a program that needs to mature over time.

Is the HR/P Metadata effort the complete program? No. It is a start and first edge for a broader practice.

Will this be important for Finance and other initiatives? Yes. It is a foundational practice.

Core Focus FY16

Focus for FY16
Metadata Strategy

Core Capabilities

- Consult on best practice
- Register data sources
- Analyze and model data
- Capture Lineage & Transformations
- Assess data trust-worthiness
- Maintain metadata models
- Capture available metadata
- Classify data for security
- Define data rules
- Drive Metadata Analysis
- Communicate metadata changes
- Drive metadata strategy

Supporting Capabilities

- Metadata management tools
- Metadata capture best practices
- Data classification practices
- Program management
- Communication and Outreach
- ETL practices and tools
- Data trust assessment
- Data modeling practices and tools
- Resource management
- Service strategy
- Service design
- Service transition
- Service operation
- Continuous service improvement

Core Focus FY16
Focus for FY16

UW EA - Reference Architectures V1.2 March 31, 2015
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Metadata Strategy

Highlights Gaps

Defines the services needed to fill the gaps

Guides the roadmaps to build those services
Resources:

EA Wiki Space: https://wiki.cac.washington.edu/display/EA/Enterprise+Architecture

email: phelpsj@uw.edu

ITANA: http://itana.org

ITANA wiki: https://spaces.internet2.edu/display/itana/Home
EA at UW

What are we working on.
Rechartering EA

A New Operating Model for Actionable Strategy and Scalable Project Engagement
To rise to the challenge of enterprise architecture’s mission amid fundamental corporate IT shifts, EA groups must address six functional priorities:

- **Era I**: Enterprise architecture evolved from an infrastructure focus to a full-stack purview.
- **Era II**: EA continues to evolve, not only to optimize the technology portfolio but to drive business capability enablement.
- **Era III**: Practices listed in each era would be considered “mature” in their time.

### ERA I: TECHNICAL ARCHITECTURE
- **Work Products**: Ad hoc artifacts
- **Project Engagement**: Mandated external oversight
- **Business Enablement**: Technology-centric
- **IT Portfolio Planning**: Infrastructure standardization
- **Portfolio Stewardship**: De facto vendor standards
- **Talent**: Domain/platform expertise

### ERA II: IT PORTFOLIO ARCHITECTURE
- **Work Products**: Standardized artifacts
- **Project Engagement**: Reactive corrective engagement
- **Business Enablement**: Process-centric
- **IT Portfolio Planning**: Application portfolio management
- **Portfolio Stewardship**: Standard setting and enforcement
- **Talent**: Cross-stack technical depth

### ERA III: ENTERPRISE ARCHITECTURE
- **Work Products**: EA services
- **Project Engagement**: Triaged involvement
- **Business Enablement**: Capability-centric
- **IT Portfolio Planning**: Service-oriented architecture optimization
- **Portfolio Stewardship**: Proactive governance through reference architecture
- **Talent**: Cross-functional hybrid skills

2000-2004 | 2005-2011 | 2012 and Beyond
---|---|---
Optimizing the Technology Portfolio | Enabling Business Capabilities |
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CEB Recommendations

- EA Services: 3 to 5 End-to-End Services
- Self Assessment Tools
- Reference Architecture Program
- EA Engagement Triage Process
EAST Formation Team

Heidi Barta, Organizational Development Manager, OVP, UW-IT

Cassy Beekman, Technology Manager, Computing Infrastructure

Chuck Benson, Assistant Director, Finance & Business Services, Facilities Services

Rupert Berk, Enterprise Solution Architect, EA

Anja Canfield-Budde, Director, Enterprise Data & Analytics

Jenni Laughlin, Program Manager, CONCERT Program

Jason Myers, Associate Director, Office of Research Information Services

Piet Niederhausen, Business Architect, CONCERT Program, Steering Committee Member, ITANA
<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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<tr>
<td><strong>Future State Planning &amp; Roadmapping</strong></td>
<td>Working with domain experts to develop future state documents, reference architectures and roadmaps. Managing the repository of these artifacts.</td>
</tr>
<tr>
<td><strong>Solution Design &amp; Alignment</strong></td>
<td>Working with teams to align their solutions to the future state and roadmaps. Helping teams design solutions that meet the architectural and business goals of the UW. Capturing the impact of the solution on various architectural artifacts (Principles, Roadmaps, Future State documents, etc.).</td>
</tr>
<tr>
<td><strong>Concept and Business Case Development</strong></td>
<td>Working with change leaders to develop their concepts and ideas and turn them into actionable business cases where appropriate. Helping change leaders to understand the business value and impact of their concepts.</td>
</tr>
<tr>
<td><strong>Assessment and Impact Analysis</strong></td>
<td>Assessing the impact of decisions and designs on both the business and technical architecture. Analyzing the impact on architectural debt.</td>
</tr>
<tr>
<td><strong>Initiative Support &amp; Delivery</strong></td>
<td>Helping change leaders keep initiatives aligned with the architectural goals.</td>
</tr>
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Reference Architecture
Program
Reference Architecture Program

Wiki - EA - Reference Architecture Program
**USABILITY**

0: Formal, instructor-led training in excess of 4 hours required

1: Less than 4 hours of formal instructor-led training required

2: Self-paced, online training sufficient

3: Basic functionality can be achieved by significant majority of users without training

4: Training not required to attain full functionality

5: Experience creates excitement and strong pull for access and use
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Goal</th>
<th>Value</th>
<th>Gap to Goal</th>
<th>Status</th>
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<tbody>
<tr>
<td>1. Functionality</td>
<td>3.0</td>
<td>3.2</td>
<td>0.2</td>
<td>At or Above Goal</td>
</tr>
<tr>
<td>2. User Experience</td>
<td>5.0</td>
<td>2.2</td>
<td>(2.8)</td>
<td>2+ Points from Goal</td>
</tr>
<tr>
<td>3. Solution Infrastructure</td>
<td>4.0</td>
<td>2.9</td>
<td>(1.1)</td>
<td>Within 2 Points of Goal</td>
</tr>
<tr>
<td>4. On-Network Experience</td>
<td>4.0</td>
<td>3.3</td>
<td>(0.7)</td>
<td>Within 2 Points of Goal</td>
</tr>
<tr>
<td>5. Complexity</td>
<td>3.0</td>
<td>1.8</td>
<td>(2.0)</td>
<td>2+ Points from Goal</td>
</tr>
<tr>
<td>6. Software and Data Integration</td>
<td>3.0</td>
<td>2.5</td>
<td>(0.5)</td>
<td>Within 2 Points of Goal</td>
</tr>
<tr>
<td>7. Security</td>
<td>3.0</td>
<td>1.6</td>
<td>(1.4)</td>
<td>Within 2 Points of Goal</td>
</tr>
<tr>
<td>8. Operability</td>
<td>3.0</td>
<td>1.7</td>
<td>(1.3)</td>
<td>Within 2 Points of Goal</td>
</tr>
<tr>
<td>9. Maintainability</td>
<td>4.0</td>
<td>1.8</td>
<td>(2.2)</td>
<td>2+ Points from Goal</td>
</tr>
<tr>
<td>10. Capacity Management</td>
<td>3.0</td>
<td>2.8</td>
<td>(0.2)</td>
<td>At or Above Goal</td>
</tr>
<tr>
<td>11. Fault Tolerance</td>
<td>3.0</td>
<td>2.6</td>
<td>(0.4)</td>
<td>Within 2 Points of Goal</td>
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<td>12. IT Portfolio</td>
<td>3.0</td>
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<td>0.0</td>
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Subject Matter Expert (SME) Map
Resources:

EA Wiki Space: https://wiki.cac.washington.edu/display/EA/Enterprise+Architecture

email: phelpsj@uw.edu

ITANA: http://itana.org

ITANA wiki: https://spaces.internet2.edu/display/itana/Home

Corporate Executive Board: http://www.executiveboard.com/

Gartner: http://www.gartner.com/technology/home.jsp
Enterprise architecture (EA) is "a well-defined practice for conducting enterprise analysis, design, planning, and implementation, using a holistic approach at all times, for the successful development and execution of strategy. Enterprise architecture applies architecture principles and practices to guide organizations through the business, information, process, and technology changes necessary to execute their strategies. These practices utilize the various aspects of an enterprise to identify, motivate, and achieve these changes."