Creating a Sustainable Architecture Organization

William Beshilas
SATURN Conference
5/7/2014
Bill Beshilas
Director, PwC Advisory

William Beshilas
One North Wacker Drive
Chicago, IL, 60606
m: 847-274-3071
William.beshilas@us.pwc.com

Professional Background
Bill Beshilas is a Director within PwC's IT Strategy & Enterprise Architecture competency. He is currently a member of PwC's Enterprise Architecture Center of Excellence.

Experience Summary
For clients, Bill develops technical target operating models that enable strategic business initiatives. Bill’s specialties include helping clients mature their architecture organization. Bill also leads architecture assessment and implementation efforts.

Main areas of expertise
• Office of the Architect (Setup, organization, governance)
• Solution Architecture
• Technology Strategy
Abstract

Our clients have asked us to help them to create or mature their architecture organizations which are typically part of the Information Technology (IT) department. To assist them, we have developed a framework that has been successfully used by more than 20 clients. The framework addresses the following aspects of what an architecture organization should be concerned with in order to be sustainable:

- Charter which includes mission and vision, roles, and organization
- Governance
- Service Catalog
- Service Delivery Management

After reviewing the framework, lessons learned from working with various clients will be presented.

From the session, the audience will learn about:

- The importance of defining the mission and vision of an architecture organization
- Understanding the need for change management

And with this awareness, the audience will be able to assess how well their architecture organization understands its environment and determine if it is meeting the needs of the organization.
Table of contents

1. Introduction
2. Reasons to Mature
3. The Office of the Architect
4. Rollout Approach
5. Making Change Stick
6. Wrap-up
Architecture plays a key role in coordinating strategy, planning, portfolios and delivery

Office of the Architect

Enterprise Strategy Development
- Strategy Formulation
- Ambition & Business Model Decisions
- Internal & External Influencers

Investment
- Prioritization and Risk Analysis
- Scheduling

Project Management
- Enterprise Program & Portfolio Management
- Resourcing

PDLC / SDLC
- Transformation Plans
- Design
- Construct
- Implement

Operate & Review

Strategic Planning
- Future State Creation
- Current State Identification
- Gap Analysis
- Roadmaps

Adapted with permission from materials by EAdirections, LLC
In doing so, architects focus on different value propositions depending on where they work

Focus on **STRATEGIC ALIGNMENT**
- Develop long range roadmaps
- Long term viability through innovation
- Stakeholder perception
- Business positioning

Focus on **TRANSFORMATION PLANS**
- Mitigate risk
- Lower cost
- Look for opportunities to improve growth and/or efficiency

Focus on **PROJECT and PORTFOLIO MANAGEMENT**
- Identify and meet objectives such as:
  - Schedule
  - Quality
  - Budget
- Mitigate Risk
From fragile to agile – Architecture is key to delivering and sustaining business value

Typical

**Business Architecture**
- Misaligned with strategy
- Inconsistent
- Low value

**IT Architecture**
- Fragmented
- Point-Point
- Inflexible
- Fragile

Desired

**Business Architecture**
- Aligned with strategy
- Consistent
- High value

**IT Architecture**
- Structured
- Scalable
- Flexible
- Agile
Architecture bridges the Strategy / Execution gap and is key to creating and capturing business value

**Architecture** designs operating models that logically organize and describe the aspects of the company:

- The ambition and business model
- The products, services, and customers
- The business capabilities
- The people, processes, information and technologies
- The corporate structure
- The interactions amongst these components (such as Governance)

- **Strategic Roadmaps**: Blueprints and modernization plans for business areas. Typically 3-5 year view.
- **Reference Architectures**: Reusable patterns for technical and operations solutions
- **Guiding Principles**: Statements used as filters for decision making
- **Standards**: A library of stable technologies and processes for consistency
- **Project Support**: Architecture involvement in implementation
PwC has seen many issues that can be addressed via improved architecture planning and design

Insufficient level of architecture definition

• No mandate exists for Enterprise Architecture
• Enterprise Architecture seen as an IT only activity
• Architecture (standards, references, blueprints) takes place in silos with no view across the entire enterprise
• Architecture seen as having no impact on either business or IT results
• Architecture governance non-existent or operating without guiding principles, reference architectures or blueprints
• Little or no sharing of business and technology platforms (except maybe infrastructure)

Ineffective or non-existent architecture organization

• Architecture skills and knowledge are absent / underdeveloped or lack maximum utilization
• Informal or no defined processes for managing or delivering architecture projects
• The architecture group has ineffective and / or inefficient organization, tools, and metrics
• Architecture seen as an “ivory tower” activity with little or no participation in actual delivery
• Incentives focused on functional / business unit performance with none at the enterprise level

Lacking alignment across business / IT

• Culture of “firefighting” rather than planning
• Integrated blueprints are either not created or do not have the support of the business and IT stakeholders
• The role of architecture lacks clarity regarding business and operational stakeholders and their decision making process
• Pressure to build near-term requirements not long-term vision
• Business areas implement own technologies (e.g. cloud) without cross enterprise considerations
• Proliferation of redundant process and applications
Establishing a robust and effective Office of the Architect will help...

- Cultivate Agility
- Right-size the Architecture Organization
- Reduce Complexity
- Establish Architecture Services & Metrics
- Establish the Value of Architecture
- Communicate the Value of Architecture
- Measure EA as an Asset
- Trace Architecture Benefit Realization
- Foster Innovation
- Accelerate Adoption of Technology
- Guide Implementation Projects
- Drive Alignment
- Establish the Architecture “Constitution”
- Establish Credibility & Trust
- Provide the Appropriate Level of Oversight
- Build the Architecture Community
- Institutionalize the Management of Architecture

© 2014 PricewaterhouseCoopers LLP (“PwC”). Not for further use or distribution without the prior written consent of PwC.
A mature Office of the Architect adds value by more effectively managing complexity and risk in the “big picture”

It will help to:

- Identify and **mitigate enterprise risks**
- Understand, manage and **reduce complexity**
- Clarify relationships between IT and business and helping establish mutual accountability
- Ensure architectural alignment with corporate strategy
- Baseline current operations and providing a clear roadmap for improvements
- Provide an independent, unbiased **view of the implications** of business and technology scenarios within and across enterprises
- Provide a **common language** across domains
- Remove process disconnects between strategic and operational planning
The Office of the Architect creates the foundation to help mature an architecture organization.
Table of contents

1. Introduction
2. Reasons to Mature
3. The Office of the Architect
4. Rollout Approach
5. Making Change Stick
6. Wrap-up
Our approach includes four tracks of work to help establish or mature an Office of the Architect (OOA)

- Architecture Service Tasks and Activities
- Inputs, Outputs, Effort and Metrics
- Accountability and Responsibilities
- Methodologies & Framework
- Tools

- Work Intake / Project Typing
- Training
- Workload Management
- Issue Management & Resolution
- Operational and Value Measurement

- Charter and Mission
- Organization Structure
- Roles and Responsibilities
- Architecture Competencies
- Communications Strategy

- Architecture Governance Bodies
- Architecture Decision Rights and Escalation
- Engagement Model with Implementation Groups
Establishing an OOA requires a set of foundational activities and a number of ongoing services

**Step 1: Foundation Activities (One-time Setup)**

- Define EA Charter
- Define Service Catalog
- Set up Governance
- Select Methodologies/Framework
- Structure & Management of the OOA
- Select and Implement Tools
- Training
- Implement Operating Model

**Step 2: Operate the EA Services**

- Create Strategic Plans & Roadmaps
- Define & Manage Standards
- Define & Manage Reference Architecture
- Manage Technology Portfolio
- Support IT Portfolio Planning
- Support Solution / Vendor Selection
- Project Architecture
- EA Service Delivery Management

**Step 3: Deliver Value for the Enterprise**

- Strategy & Assess Stage
  - Deliver blueprints, roadmaps, reference architecture and standards
- Design / Construct / Implement Stages
  - Oversee and align implementation to the architecture
- Operate & Review Stage
  - Validate and monitor results

© 2014 PricewaterhouseCoopers LLP (“PwC”). Not for further use or distribution without the prior written consent of PwC.
Establishing an OOA requires a set of foundational activities and a number of ongoing services (cont’d)
An OOA matures with consistent and clearly defined approaches, artifacts, and engagement models

**Defined EA Services**
Documented processes for identifying the appropriate service to suit the OOA customers’ needs

**Defined EA Service Delivery Model**
Identified EA roles and responsibilities with respect to each stage of service execution

**Defined Architecture Governance**
Architecture decisions overseen by both business and IT

**Communications & Change Management**
- Establish partnership amongst business and technology stakeholders, document communication strategy
- Communicate value proposition for EA organization
- Demonstrate clear value in staffing appropriate architects to the most challenging business unit projects
- Clearly and regularly report EA-driven business metrics to stakeholders
- Organize EA and business unit blueprinting efforts with a common playbook
Table of contents

1. Introduction
2. Reasons to Mature
3. The Office of the Architect
4. Rollout Approach
5. Making Change Stick
6. Wrap-up
PwC’s approach to planning & roll-out considers these tracks and focuses on establishing or expanding an enterprise architecture capability

Document and Assess Existing EA Practice

- Understand Corporate Strategic Foundation and Agenda
- Understand EA Ambition and Business Model
- Understand and finalize EA Business Needs
- Assess Customer Offering and current EA Operating Model (People, Process, Technology)

Develop Target Operating Model

- Document Guiding Principles
- Scope, design and document EA Service Catalog (Process)
- Document EA Competencies and Organization (People)
- Design and document EA Technology and Information strategy
- Establish EA Charter

Develop Roadmap and Business Case

- Develop EA Business Case
- Develop EA Roadmap and Change Management Plan
- Define Metrics/Dashboards
- Develop Training Plan
- Develop Communication Plan
The first phase assesses and documents the existing EA practice

Activities

- Validate strategic context of the EA change initiative
- Launch discovery effort to gain understanding of process, people and technology supporting current EA Operating Model
- Conduct collaborative workshop to finalize current state understanding of EA Operating Model, and future state opportunities

PwC Tools

- Various PwC tools and templates including interview guides, architecture skills models, and metrics models
- PwC Operating Model Framework
- EA Maturity Framework

Deliverables

- Corporate/EA Strategy Summary
- Customer Offering and Current EA Operating Model Assessment
  - EA Service Catalog Assessment (Process)
  - Organization Assessment (Organization)
  - EA Competency Assessment (People Capabilities)
  - Technology/Tools Assessment (Technology)
  - Information Assessment (Information)

Value: Understanding current EA capabilities and interactions within the broader organization will provide valuable insight into priorities and the design of EA operating model
The second phase describes the target state and develops an understanding of the current state

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Define EA vision, charter and guiding principles</td>
</tr>
<tr>
<td>• Define EA services catalog and develop detailed EA process definitions</td>
</tr>
<tr>
<td>• Define EA Organization structure and RACI</td>
</tr>
<tr>
<td>• Design architecture governance model to manage decisions and standards compliance across the program</td>
</tr>
<tr>
<td>• Identify tools that will support service catalog (will be in the form of future state recommendations)</td>
</tr>
<tr>
<td>• Define metrics and measurement approach</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PwC Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PwC Office of the Architect framework</td>
</tr>
<tr>
<td>• PwC EA Governance Framework</td>
</tr>
<tr>
<td>• PwC Operating Model Framework</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>• EA Charter</td>
</tr>
<tr>
<td>• High Level Target Operating Model which includes:</td>
</tr>
<tr>
<td>- EA Service Catalog (with detailed processes)</td>
</tr>
<tr>
<td>- EA Organization Structure and documented Competencies</td>
</tr>
<tr>
<td>- EA Tools/Templates (recommendations)</td>
</tr>
<tr>
<td>- EA Metrics Matrix</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA Service Catalog</td>
</tr>
<tr>
<td>EA Competencies Matrix</td>
</tr>
<tr>
<td>EA Target Operating Model</td>
</tr>
<tr>
<td>EA Organization &amp; Governance Model</td>
</tr>
<tr>
<td>EA Metrics Matrix</td>
</tr>
</tbody>
</table>

Value: Designing the right EA operating model will help operationalize EA within the organization and help make broader IT organization and IT Transformation successful
The last phase defines a roadmap and supporting business case

Activities

- Conduct meetings with selected stakeholders to communicate the new engagement model and architecture Services
- Work closely with the organization to develop a business case and roadmap for the EA initiative
- Document key stakeholders, how EA capabilities will be communicated to them, what training will be necessary and how training will be delivered
- Develop communication materials to take on “roadshow” type presentations across the organization

PwC Tools

- Roadmap & Business Case
- Change Management Framework

Deliverables

- EA Business Case
- EA Roadmap (with sequenced programs and associated project summaries)
- Change Management Plan
- Training Plan
- Communication Strategy

Value: Successful rollout of new EA capabilities will help realize the benefits of broader IT Transformation initiatives through more efficient and effective standards and governance processes
Table of contents

1. Introduction
2. Reasons to Mature
3. The Office of the Architect
4. Rollout Approach
5. Making Change Stick
6. Wrap-up
**PwC has broad experience helping companies improve their architecture organizations**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Client Challenge</th>
<th>PwC’s Response</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services</td>
<td>Lacked a clear operating model for working in a federated IT environment resulting in duplicated capabilities across the divisions.</td>
<td>Working with the CTO leadership, PwC helped develop an operating model based on COBIT, TOGAF, and PwC's EA Framework. The operating model defined the engagement model, key services, roles and responsibilities, and the processes for the development of architecture assets.</td>
<td>Established an aligned and well understood operating model between the divisions’ IT groups and the central architecture organization resulting in better teaming and alignment to eliminate duplicate capabilities.</td>
</tr>
<tr>
<td>Healthcare</td>
<td>The client needed a robust architecture organization to support their transformation.</td>
<td>PwC worked with the client to help define the OOA operating model consisting of: • Definition of roles and responsibilities, services, and metric • Engagement model • Development of a project architecture competency center</td>
<td>The architecture organization filled a pivotal role in a successful transformation.</td>
</tr>
<tr>
<td>Pharma</td>
<td>As part of a larger cost savings commitment to Wall Street, the client identified they were spending too much on IT by way of project overruns, failed projects, and or duplication of capabilities.</td>
<td>PwC worked with the client to help define the EA operating model, consisting processes, architecture service offerings, and integrating the operating model into the client’s IT delivery operating model.</td>
<td>A defined operating model resulting in the engagement of the architects at the right time in the IT lifecycle to catch projects at risk or identify duplication of capabilities helping the client to meet its commitment to Wall Street.</td>
</tr>
<tr>
<td>Healthcare Payer</td>
<td>The client needed the ability to practice SOA to enable IT to be more agile to quickly respond to business opportunities.</td>
<td>PwC worked with the client to help develop a lightweight architecture lead framework consisting of process and templates to deliver SOA.</td>
<td>Over time the client’s systems evolved to be agile and lend themselves to be responsive to the business’s needs.</td>
</tr>
<tr>
<td>Financial Services</td>
<td>The client’s architecture organization was spending too much time delivering tactical project support where there was a need for more strategic work.</td>
<td>PwC worked with the client to help define the architecture operating model with a 1 year roadmap to move the architecture organization from 100 percent tactical work load to a 60/40 mix of strategic and tactical work load.</td>
<td>The client delivered more strategic work consisting of reference architectures over the previous year’s effort.</td>
</tr>
</tbody>
</table>
PwC has developed valuable insights from our experiences creating and transforming OOAs

<table>
<thead>
<tr>
<th>INSIGHT</th>
<th>HOW IT IS APPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An exhaustive enterprise level blueprint is challenging to build</td>
<td>- Split blueprint into tiers – Enterprise “optimized core”, business unit specific, functional and divisional</td>
</tr>
<tr>
<td>all at once</td>
<td></td>
</tr>
<tr>
<td>2. Leading practices combine direction-setting enterprise blueprint,</td>
<td>- Use Enterprise Blueprint for direction-setting and BU/domain blueprints to drive projects</td>
</tr>
<tr>
<td>business unit, and domain blueprints</td>
<td></td>
</tr>
<tr>
<td>3. A centralized team of architects is critical in driving EA standards</td>
<td>- Consolidate key architects into centralized architects pool</td>
</tr>
<tr>
<td>and approaches</td>
<td></td>
</tr>
<tr>
<td>4. Architects should be assigned to projects as core team members</td>
<td>- Operating model defines project requests, staffing and metrics</td>
</tr>
<tr>
<td>(60% of Architect Fulltime equivalents)</td>
<td></td>
</tr>
<tr>
<td>5. Measure EA as an asset</td>
<td>- Measure costs to provide the service and the return the business gets from the business capabilities delivered</td>
</tr>
<tr>
<td>6. EA leadership requires strong management, business operations and</td>
<td>- Seed EA leadership with EA Director + Chief Architect</td>
</tr>
<tr>
<td>technology skills, most likely in 3 different types of people</td>
<td>- Select technology-focused architects based on the client’s particular technical environment</td>
</tr>
<tr>
<td>7. EA methods and governance should be integrated into existing work</td>
<td>- Insert new checkpoints and updated deliverables in your core SDLC</td>
</tr>
<tr>
<td>processes (e.g., project approvals, SDLC) rather than a new overlay</td>
<td></td>
</tr>
<tr>
<td>8. Enterprise Architecture is not always the best name for communicating</td>
<td>- Use naming already in place with strategy &amp; planning or finance functions</td>
</tr>
<tr>
<td>9. Strong credibility and trust amongst business and IT partners can</td>
<td>- Build early credibility by demonstrating quick results- “Get the Win”</td>
</tr>
<tr>
<td>be a predictor of EA success</td>
<td></td>
</tr>
</tbody>
</table>
Making Change Stick

Internal Focus

• Involve the architects
• Don’t rush to a tool
• Don’t focus on a framework
• Look for early wins
• Only do enough for what makes sense
• Be mature where you need to be mature

Broader Context

• Understand the broader drivers
• Involve stakeholders early and often
• Build a Community of Interest (COI) to extend and enhance the architecture organization
• Communicate Communicate Communicate!
Wrap-up
Questions

Please feel free to send me an email:
william.beshilas@us.pwc.com