Building the EA Charter: A VU Experience
Content

Initial Attempt to establish Architecture

Outcomes

Revised Approach to establishing EA

Rationale
## Initial Attempt

### Scope
- Standardise development platforms, tools, and languages.
- Provide design engineering services to project teams.

Source: Enterprise Architecture Executive Council research
Initial Attempt Scope

- Standardised
  - development platform
  - Tools and Languages

- Adopted SDLC Framework

- Implemented ESB simplify interfacing - SOA

- Implemented IDM simplify user access
Technical Outcome

- Standardising development platforms, tools, and languages
- Providing design engineering services to project teams
- Embedding architectural standards into development lifecycles
- Creating hardened patterns
- Conducting design reviews
University had some 90 to 150 active Projects

Major Projects delays, overruns and scope creeps

Projects / programs scopes intersected and contradicted

Limited enterprise wide value measures for these initiatives

Solution duplications and Resource contention
EA is an Iterative Process
Enterprise Context is the process of:

- Identifying internal and external environment trends
- Articulating the business strategy
- Identifying requirements
- Creating principles
- Developing Anchor Models of the business

One of the first steps in EA is to create an “Enterprise Context”
Revised Approach

1. Victoria University’s Operating Environment
2. Strategies and Challenges
3. EA Role and Challenges
4. EA Delivery Experience
Victoria University (VU) is a multi-sector educational institution (founded in 1916 as the Footscray Technical School), and now providing Vocational / Further / Higher education.

Student Population of around 50,000 - 50% West 25% Overseas 25% from other Australian States and Territories.

Mission
Empower students from diverse countries and culture, socio-economic and education backgrounds to succeed in lifelong learning.
Operating Environment

Market Drivers

- Emergence of new jobs and the demise of other occupations
- Skill shortages and obsolescence
- Multiple and transient careers with associated re-skilling
- Changes in industry and knowledge demands
Global Market Drivers

The continuing integration of economies across the world and strengthening of the knowledge economy

Application of market principles, combined with greater public accountability and regulation of education in many countries

Impact of technology, particularly tools such as social networking and the rise of pervasive computing and knowledge networks in all spheres of life;

Focus on the meaning of ‘university’ and ‘quality’ within the imperatives for mission and context differentiation

Demographic and generational trends associated with a greater diversity of learners and learning styles
VU Strategic Focus

Organisation Agility

- Student Experience
- Research Industry and community Engagement
- Agile Capacity & Capability
- Optimise CODB
Reduce Complexity
Reduce Cost
Increase portfolio ROI
Improve Business and Systems flexibility
Optimize Capacity to build capability
How Investment in EA Drives Business Results

Investment in EA

- Agility
- Reduce Cost
- Increase Revenue

Business Drivers

IT Performance

EA Deliverables

- Optimising Capacity
- Simplification
- Standardisation
- Functionality Improvement

**EA Deliverables**

- Improve Capability
  - Effective Business Process Management will release capacity to enable capability

- Asset Portfolio Optimisation
  - Effectively manage IT assets across their lifecycle to maximise efficiencies.

- Project Alignment and Standard Setting
  - Maximising project efficiencies by sharing enterprise-wide view of resources.

- New Technology Introductions
  - Fulfilling IT’s strategic direction by generating insight into value creating emerging technologies.
EA Approach

**Key Roles**
- Standardizing development platforms, tools, and languages
- Providing design engineering services to project teams
- Embedding architectural standards into development lifecycles
- Creating hardened patterns
- Conducting design reviews

**Scope**
- Map interdependencies between processes, applications, data, and technologies.
- Partner with the business to optimize information flows and processes.

**Solutions**
- Map interdependencies between processes, applications, data, and technologies
- Partnering with the business to optimize information flows and processes
- Enterprise data modeling and reference data management
- IT strategic planning and investment prioritization
- Aligning IT with business processes

Source: Enterprise Architecture Executive Council research
EA’s Role

...creating a need for increased business flexibility and reduced IT complexity

Goals Supported by EA

- Pan-enterprise interoperability
- Enhanced IT and business flexibility
- Complexity and risk mitigation

Source: EAEC Activity-Value Diagnostic; CIO Executive Board research; Corporate Strategy Board research; CFO Executive Board research; Enterprise Architecture Executive Council research.
EA Challenges

In an environment of decelerating IT budgets and growing scrutiny...

Average IT Budget Increase

- 6.5% in 2005–2006
- 5.4% in 2006–2007
- 2.8% in 2007–2008

In addition, almost 80% of CIOs surveyed in November said they were reevaluating 2009 IT budgets.

n = 159 CFOs.

Source: Enterprise Architecture Executive Council research
**EA Environment**

*...major business events are occurring with greater frequency...*

**Intensity of Business Change**

*Average Frequency of Events, Past Three Years*

<table>
<thead>
<tr>
<th>Events</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Launched new products and/or services</td>
<td>7–10 times</td>
</tr>
<tr>
<td>Extended operations to new territories</td>
<td>2–3 times</td>
</tr>
<tr>
<td>Outsourced/offshored major functions to third parties</td>
<td>2–3 times</td>
</tr>
<tr>
<td>Engaged in mergers and acquisitions</td>
<td>2–3 times</td>
</tr>
<tr>
<td>Major organizational restructuring</td>
<td>2–3 times</td>
</tr>
<tr>
<td>Major regulatory/compliance changes</td>
<td>2–3 times</td>
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</tbody>
</table>

n = 39.

Source: Enterprise Architecture Executive Council research
Factors Undermining EA’s Value Proposition

Mismatched Business-IT Planning Horizons

<table>
<thead>
<tr>
<th>EA Planning</th>
<th>42 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Planning</td>
<td>18 Months</td>
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</tbody>
</table>

Source: Enterprise Architecture Executive Council research
EA Approach

<table>
<thead>
<tr>
<th>1</th>
<th>Technical</th>
<th>2</th>
<th>Solutions</th>
<th>3</th>
<th>Portfolio</th>
<th>4</th>
<th>Business</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
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</table>

**Scope**
- Create infrastructure roadmaps and standards
- Introduce new technologies to the enterprise
- Provide integration and security services to project teams
- Standards development platforms, tools and languages
- Provide design engineering services to project teams
- Maintain mission critical applications inventories
- Retire applications to simplify the systems portfolio
- Map interdependencies between processes, applications, data and technologies
- Partner with the business to optimise information flows and processes

Source: Enterprise Architecture Executive Council research
The EA Maturity Curve

**EA IS MOVING TO STRATEGIC CAPABILITIES**

*Expanding EA responsibilities yields greater business benefits*

1. **Technical Architecture**
   - Creating infrastructure roadmaps and standards
   - Introducing new technologies to the enterprise
   - Providing integration and security services to project teams

2. **Solutions Architecture**
   - Standardizing development platforms, tools, and languages
   - Providing design engineering services to project teams

3. **Portfolio Architecture**
   - Maintaining global applications inventories
   - Retiring applications to simplify the systems portfolio

4. **Business Architecture**
   - Mapping interdependencies between processes, applications, data, and technologies
   - Partnering with the business to optimize information flows and processes

**Speed of Business Capability Enablement**

**Business Risk Mitigation**

**IT Agility Enhancement**

**IT Cost Reduction**

**EA Maturity**

Source: Enterprise Architecture Executive Council research.

VICTORIA UNIVERSITY
MELBOURNE AUSTRALIA
Accelerating EA’s Evolution

- Managing the Asset Portfolio
- Forming the Function
- Communicating Value
- Planning Architectural Migration
- Defining Governance and Project Engagement
# Overview of Architecture Planning Process

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Stakeholder Roles</th>
<th>Planning Activity</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources Committee IKMC</td>
<td>Strategic Decisions</td>
<td>Corporate-wide strategic direction</td>
<td>Prioritisation and investment, ROI trade-offs</td>
</tr>
<tr>
<td>Architects Partnered with Division Executives Enterprise Architecture</td>
<td>Facilitating and Coordinating</td>
<td>Business plans and architecture roadmap</td>
<td></td>
</tr>
<tr>
<td>Enterprise Architecture Review Board (EARB) Solutions Architect Business Architect Innovation Architect</td>
<td>Architectural Recommendations</td>
<td>Roll up of domain architecture to enterprise architecture - Analysis of capability gaps, cross-division impacts, and investment opportunities - Recommendations to Corporate Resource Allocation Committee</td>
<td>Identified gaps and opportunities, Trade-offs between operational efficiency and customer focus, time-to-market and innovation, Required process changes for architectural effectiveness</td>
</tr>
<tr>
<td>Implementation Level Architecture Review Board (ARB) Enterprise Architecture Project Mgt Office Enterprise Solutions Enterprise Services</td>
<td>Execution</td>
<td>Project consultation - Review and grant expectations to standard</td>
<td></td>
</tr>
</tbody>
</table>
Roles in Development Stages

**Two Key Questions**
- Can functionality be built as an enterprise service?
- Can the project reuse existing services?

**Strategy**
- Consult with Architecture Program Member

**Project Initiation**
- Project Initiation Assessment
- Determine Architecture Impact Level
- Assign Architect to Assessment
- Complete Assessment Document Project Initiation Feedback
- Post-Findings Project Tracking
- Project Funded: Yes, End; No

**Kickoff/Requirements**
- Review Project Initiation Feedback
- Engage Architect(s) in Project

**Design**
- Complete Design
- Request a Design Assessment
- Complete Assessment Document Design Feedback
- Vendor Technology Contract(s)?
  - Yes
  - No
  - Vendor Technology Contract(s) Feedback
- Complete Assessment Document Contract Feedback

**Build and Test**
- Complete Build and Test
- Participate in PQA Review
- Approve Architecture Portion of PQA Review
- Yes: Architecture Issues
- No

**Implement**
- Implementation Project

*Contract negotiations may take place earlier or later than design phase.*
## EA value influence Diagram

<table>
<thead>
<tr>
<th>Value Drivers*</th>
<th>EA Levers</th>
<th>Specific EA Deliverables</th>
</tr>
</thead>
</table>
| 1. Concentrate Spending on High-Value Projects | • Prioritise Initiatives Based on Alignment with Strategy  
• Combine/Consolidate Projects | • Systems Roadmaps |
| 2. Speed of Business Capability Enablement | • Improve Data Quality and Access  
• Simplify Business Processes  
• Less Complex Interfaces | • Reliable Data Sources  
• Workflow Optimisation  
• Common Integration Infrastructure |
| 3. Lower Application Operating Costs | • Fewer Systems  
• Greater Reliance on Standard Technologies | • Active Retirement Plans |
| 4. Reduce Development Costs | • Common Systems Design  
• Common Development Environment | • Code Reuse  
• Design Patterns  
• Common Integration Infrastructure  
• Standardised Development Tools and Platforms |
| 5. Enable Greater Degree of Outsourcing | • Systems Consolidation  
• Common Systems Design  
• Better Documentation of Interdependencies | • Interdependencies Maps  
• Architectural Design Reviews |
| 6. Eliminate Redundancy/Duplication | • Common Systems Design  
• Combine/Consolidate Projects | • Architectural Design Reviews  
• Systems Roadmaps |
| 7. Probability of Solutions to Subscale Businesses | • Less Complex Interfaces  
• Common Systems Design | • Common Integration Infrastructure  
• Code Reuse |
| 8. Reduce Compliance Documentation Costs | • Fewer Systems  
• Less Complex Interfaces | • Active Retirement Plans  
• Common Integration Infrastructure |
| 9. Greater Reliability | • Improve Data Quality and Access | • Reliable Data Sources |
| 10. Lower Licensing Costs | • Fewer Systems  
• Systems Consolidation | • Active Retirement Plans  
• Interdependencies Maps |

* Other drivers considered but not quantified: Business Optimisation, New Business Capabilities, Productivity, and Workflow.

Adopted from: Enterprise Architecture Executive Council research
EA Principles

1. Architecture will set the strategy for technology for three to five years into the future.

2. Weighted consideration should be given to a vendor architecture that contributes to and strengthens Enterprise Architecture.

3. For IM investments, the project design process includes architectural review and design certification by an Enterprise Architect.

4. A complete architecture includes the following five components: business process, information data, applications, integration, and infrastructure.

5. Design for global use includes the following:
   - Every application should be designed to be global, scalable, and flexible
   - Applications must have a planned lifecycle and asset map
   - Architect applications as systems and engineer for supportability
   - Architecture frameworks for all components must expect to support internal and external customers and interfaces on a global level
   - VU data standards will be established and globally used by all applications
   - Industry standards will be leveraged wherever feasible

6. VU Information is a valued asset, and its use must be designed and protected at the enterprise level, rather than a specific company or project asset.

7. Design applications for adoption of, not mapping to, data standards.

8. Design for data quality management and transparency, establishing authoritative data sources and ownership.

9. IT standards will be used; a nonstandard design will require an exception waiver, and all required resources will be fully funded by the owner.

10. Information security services and solutions will be standards-based.

11. Security decisions will be based on a risk-management process, “as a risk taken by one is a risk shared by all.”

Adopted from: Enterprise Architecture Executive Council research
EA and BPA/BPM Capability

What is Needed
Strategic Focus
EA

How to do it?
Understanding Organisational Maturity
EA and BPCC

How to do it?
Develop appropriate Delivery Structures
EA and BPCC

Doing it
Select fitting Technology
BPM

Business & Management Architecture

Setup Sound technology Architecture

Deploy Process Architecture

MANAGING CHANGE

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Strategic Business Focus

- Measure, Manage and Improve Organisational Process Maturity
- Develop appropriate CI Delivery Structures Six Sigma / Lean
- Maintain fitting Technology/s EA/BPA/BPM

EA/BPA/BPM Sustainability
EA Approach

Key Challenges

• Determining a data ownership strategy
• Collaborating with business units to identify core business processes and opportunities for rationalization

Source: Enterprise Architecture Executive Council research
Thank you & Questions

Acknowledgement: Sheralee for admin help
Gartner and EAEC for content help