Pragmatic Enterprise Architecture Framework (PEAF) & Universities

22\textsuperscript{nd} November 2011

Keith Frampton
The customary who am I slide

- Over 30 years in ICT industry
  - Many different roles/careers, including IBM, ANZ, KMF Consulting, The Marlo Group, part-time university lecturer

- Since 2009 – KMF Consulting (again)
  - Governance & architecture
  - Wide range of clients – currently RMIT

- Also researcher
  - IT Architect’s characteristics
  - Industry methodology usage
  - Workforce skill requirements
  - Enterprise Architect value
Outline

• What is PEAF
  – Structure
  – Key aspects
• Why we chose it?
• How have we used it?
• PEAF strengths & weaknesses
• Opportunities/challenges in university environment
PEAF - structure

Origins?
• Developed by Kevin J. Smith
• Enhanced/revised/focussed through extensive consultation
• Pragmatic is actual focus

• Key ‘artefacts’
  • Products
  • Processes
  • Sample deliverables/plans/etc.
## PEA - Products

<table>
<thead>
<tr>
<th>Foundation</th>
<th>The foundation section provides the products required for starting and/or progressing an existing EA initiative.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>People and Communication are the key to EA. Without them and their understanding, everything else is superfluous.</td>
</tr>
<tr>
<td>Model</td>
<td>The main artefact of EA are the models which allow information to be gathered, viewed and analysed.</td>
</tr>
<tr>
<td>Governance</td>
<td>Providing an environment to guide change as it happens throughout the organisation.</td>
</tr>
</tbody>
</table>
# PEAF – Processes - Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prepare</strong></td>
<td>The Prepare phase of PEAF is concerned with setting out the business case for starting an EA initiative and gaining the required remit, budget and resources. The resulting EA Implementation Plan is born out of considering the Maturity model, deciding upon the level that an organisation currently maps to, the level that it wishes to map to, and the timescales in which it would like to make the transition.</td>
</tr>
<tr>
<td><strong>Implement</strong></td>
<td>The Implementation phase of PEAF is concerned with making the necessary identified changes and adjustments to the enterprise in preparation for it to be able to utilise Enterprise Architecture. The work required to be undertaken is totally dependant on each enterprises specific goals and timescales identified in the Prepare phase of PEAF (which considers their current and target EA maturity levels).</td>
</tr>
<tr>
<td><strong>Operate</strong></td>
<td>The Operate Phase of PEAF is concerned with the processes of “doing” Enterprise architecture. These processes are largely the same for all enterprises although they may change slightly depending upon the structure of specific enterprises.</td>
</tr>
</tbody>
</table>
Key (differentiating) aspects of PEAF (part 1)

• Top down
  – Driven from business vision/strategy/plans
  – Business modelling based on Business Motivation Model approach
    – (http://www.businessrulesgroup.org/second_paper/BRG-BMM.pdf)

• Clear orientation for change
  – Human Resources related
    – Includes KPIs, position descriptions, etc.
  – Overall
    – Ongoing process
    – Continual communication
Key (differentiating) aspects of PEAF (part 2)

- Enterprise debt
  - Compliance/deviation related
  - Tracked across ICT/enterprise
  - "Borrowing' against technology future
### Key (differentiating) aspects of PEAF (part 3a)

**• Maturity model (part 1)**

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nowhere</td>
<td>Somewhere</td>
<td>Everywhere</td>
<td>Cultural</td>
<td>Optimised</td>
</tr>
<tr>
<td>Products and Processes do not exist, or if they do exist are not understood, out of date and largely Shelfware</td>
<td>Products and Processes do exist but are not widely used or used incorrectly.</td>
<td>Products and Processes are used by everyone but only because they are told to.</td>
<td>People do things because they know it's the right thing to do not because they are told to.</td>
<td>Products and Processes are regularly reviewed and adjusted to extract the last scraps of efficiency.</td>
</tr>
<tr>
<td>Promotion out of this level should be an immediate and pressing objective.</td>
<td>Promotion to this level indicates a step in the right direction even if that step is not very large or the benefits are not large.</td>
<td>Promotion to this level indicates another good step and even if people do not know why they do things at least they are systemically guided to do the right thing.</td>
<td>Promotion to this level indicates a self governing ecosystem without much need for management.</td>
<td>Promotion to this level indicates an enterprise that has reached the limit of maturity.</td>
</tr>
</tbody>
</table>
## Key (differentiating) aspects of PEAF (part 3b)

Maturity model (part 2)

**Categories** - The categories for maturity classification mirror the structure of PEAF

<table>
<thead>
<tr>
<th>Culture</th>
<th>Communication</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nothing happens without communicating with people or without the right motivation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Metamodel Content Tools</th>
<th>Principles Waivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The main product/resource of Enterprise Architecture</td>
<td>Definitions of guiding principles and recording deviation from them.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Governance</th>
<th>EA Education Strategic Planning Current State</th>
<th>Options &amp; Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The key operational processes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process (Operational)</th>
<th>Culture</th>
<th>Model</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Key (differentiating) aspects of PEAF (part 3c)

- **Maturity model (part 3)**

<table>
<thead>
<tr>
<th>EA Maturity Evidence</th>
<th>Level 1: Nowhere</th>
<th>Level 2: Somewhere</th>
<th>Level 3: Everywhere</th>
<th>Level 4: Cultural</th>
<th>Level 5: Optimised</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>“What’s EA?”</td>
<td>LOB &amp; IS Management aware of EA, what it is, what it is not, what benefits it brings.</td>
<td>IS and 1 LOB Management supports EA effort.</td>
<td>IS &amp; all LOB Management involved in Quarterly EA Steering Group meetings, chaired by the CEO.</td>
<td>EA has become part of the culture understood and bought into by every single employee.</td>
</tr>
<tr>
<td></td>
<td>“Why do we need it?”</td>
<td>Stakeholders are made visible and are engaged.</td>
<td>IS and 1 LOB Management provides time and resource for EA Communication, EA Modelling, EA Governance and EA Process tasks.</td>
<td></td>
<td>IS and all LOB Management involved in optimizing EA communication throughout the organisation.</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Board Members - based on current years performance.</td>
<td>Board Members - based on current years performance.</td>
<td>Board Members - based on current and future years performance.</td>
<td>Board Members - based on current and future years performance.</td>
<td>The motivation model is optimized on a yearly basis.</td>
</tr>
<tr>
<td></td>
<td>Workers - based on current years performance.</td>
<td>Workers - based on current years and future performance.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Why did we choose it?

- All of the above reasons &
  - Lightweight
  - Cost
  - Simplicity of expected subsequent integration with TOGAF
  - And language!
How have we used it?

• Generate/guide/influence/check/etc. EA journey
  – Introduce ideas
  – Show examples
  – Reasons for conversation
  – Etc.

• Facilitate ICT governance design
  – Business involvement
  – Compliance/deviation approaches

• Assist in choosing areas of focus for EA adoption/change
  – Maturity model discussions

• Ideas/sources for approaches
  – Source material, training, forums etc.
Adapted EA Maturity Model (part 1)

Maturity Levels

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconscious Incompetence</td>
<td>Conscious Incompetence</td>
<td>Conscious Competence</td>
<td>Unconscious Competence</td>
</tr>
</tbody>
</table>

**Undesirable.**

Products and Processes do not exist, or if they do exist are not understood, out of date and largely Shelfware.

Promotion out of this level should be an immediate and pressing objective as it would provide business benefits.

**A step in the right direction.**

Products and Processes do exist but are not widely used or used incorrectly.

Promotion to this level indicates a step in the right direction even if that step is not very large or the benefits are not large.

**A reasonable target.**

Products and Processes are used by majority but only because they are told to.

Promotion to this level indicates another good step and even if people do not know why they do things at least they are systemically guided to do the right thing.

**A stretch target.**

People do things because they know it's the right thing to do not because they are told to.

Promotion to this level indicates a self governing ecosystem without much need for management.
Major RMIT ICT Governance Groups

RMIT Senior Executive Management

ICT Investment & Oversight Mechanisms

RMIT Senior Executive Management

Major Projects Committee

ICT Strategy Committee

VCE

Legend
- Group
- Architecture Group
- Object

ICT Plan Reference Group

ETAG

RTAG

WWG

Architecture Advisory Group

Business & ICT Maxims Group

ITS Architecture and Standards Group

Target Architecture

Governance Mechanisms & Processes

Project Steering Groups

alignment

Shapes

Governance Model

guides

advises

advises

decides & informs

directs & endorses

decides & ensures

reference

informs

Escalation

Escalation

Strategy Formulation Process

Business Strategy

IT Strategy
PEAF strengths & weaknesses

- **Strengths**
  - Business oriented
  - Focusses on ‘soft matters’
    - Governance
    - People
  - Easily tailored

- **Weaknesses**
  - Easily tailored
  - Linkage to technology models
  - Lack of industry skills
  - Does not align with ICT ‘experts’ focus on tangibles & low level details
How to exploit?

• Use as set of tools!
  – Use/adopt the maturity model
    – Tailor
    – Discuss
    – Use to drive/prioritise discussion/actions/project alignment
  – Commence ‘enterprise debt’ conversation
    – Note: LONG journey
  – Use to assist in choosing areas of focus
    – Process approach
    – Product areas
    – Governance, governance, governance, …………
  – Starter for modelling support that business understands
  – Use for ideas/sources for approaches
  – Do the training!
Conclusion

- Very good high level business focussed EA framework
- Several very useful key artefacts & differentiating factors
- Open source – easily tailorable
- Range of strengths & weaknesses
  - Some the same!
- Use as part of EA ‘toolkit’

- Acknowledgements
  - Michael Scouller, Jon Bell, April Weiss and many others from RMIT
  - Kevin J. Smith from Pragmatic
  - Many other people
Questions