Transforming an Organisation from Fragile to Agile with EA, SOA and BPM

Glenn Smyth – Founder and CE
Fragile to Agile Pty Ltd

“The best way to predict your future is to invent it”
Frank Herbert, Dune
Fragile to Agile Introduction

- Adelaide based **independent** dedicated architecture company launched in 2009
- We specialise in
  - Enterprise Architecture – “Town Planning” for ICT
  - Business Architecture (Capability Model) based EA
  - Business Executive level accessibility and buy-in
  - Transformation programs based on a BPM/SOA target state – the core of an Agile technology future
  - Business Outcome driven Transformational Roadmaps – from Fragile to Agile
  - Solutions Architecture – “High level design for projects”
  - Assisting organisations adopt EA as a practice
Enterprise Architecture Definition – Our view:

“The alignment of Technology Design, People Design and Business Design to ensure that together they deliver on Business Intent.”

Enterprise Architecture Value Proposition - Our view:

“EA enables you to deliver your business strategy with confidence whilst minimising total cost of ownership and risk and maximising future agility”.

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Overview

• Where are we now? Fragile Inc.
• Where do we need to be? Agile Inc.
• What do we need to get there? Agility Pyramid
  • BPM/SOA based Target State
  • Business Capability Model (BCM)
  • Seamless end to end approach to change
• How do we make it happen? From strategy to execution
  • Define Operating Model
  • Determine BCM Sharing Model
  • Determine Service Containers
  • Develop BCM-based Target State
  • Develop Solution Roadmap
  • Implement an Integrated Architecture Framework
  • Establish right-sized Architecture Governance
• Summary
Solutions at Fragile Inc.
Channel

Data

Process

Rules

Solutions at Fragile Inc.
Where are we now?
Processes at Fragile Inc.

Organisational DNA

“Who we are, who we aren’t”

Strategic Planning Process

“Making the strategy executable”

Investment & Prioritisation Process

“Managing Our Project Portfolio”

Organisational Decision Factors

“Making Informed Decisions”

Conceptual Design Process

“Agility by Design”

Architecture Governance

“Keeping Everyone Honest”

Processes at Fragile Inc.
Solutions at Agile Inc.

Business Rules Engine
- Data
- Enterprise Service Bus
- Business Process Management
- Channels
Channels

Business Process Management

Enterprise Service Bus

Legacy  COTS  In-house Build  Etc.  Etc.  Etc.

Data

Agile Inc. Enterprise View
Agility by Design

Strategic Planning Process (SPP)

Investment & Prioritisation Process (I&PP)

Conceptual Design Process (CDP)

Organisational DNA

Organisational Decision Factors

Deliver & Implement Process (D&IP)

Change Delivery Framework

Project Mgt Framework

Architecture Governance Framework

Business Transformation The Fragile to Agile Way

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Agility by Design

What do we need to get there?
What do we need to get there?

Agility Pyramid

Business Strategy
- Value Proposition
- Competitive Differentiators
- Operating Model
- Values

Enterprise Architecture
- Business Intent
- Business Design
- People Design
- Technology Design

Flexible Services
- Service Based Business
- Service Oriented Architecture

Dynamic Business Processes
- Business Process Management
- Lean Manufacturing

Agile Business
What do we need to get there?
What do we need to get there?

Agility Pyramid

Dynamic Business Processes
- Business Process Management
- Lean Manufacturing

Flexible Services
- Service Based Business
- Service Oriented Architecture

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- People Design
- Technology Design

Business Strategy
- Value Proposition
- Competitive Differentiators
- Operating Model
- Values

Business Capability Model
What do we need to get there?
What do we need to get there?

Business Capability Model Example – Exec View

CM-Channel-Management
CM-Online
CM-Paper
CM-Electronic-Interfaces
CM-Face-To-Face
CM-Phone

MM-Medication-Management
MM-Pharmacy
MM-Prescription-Management
MM-Map-Of-Medicine

CR-Clinical-Risk-Management
CR-Risk-Management
CR-Quality-Mgt
CR-Infection-Control
CR-Case-Mgt

PR-Provider-Management
PR-Provider-Register
PR-Commissions

HM-Hospital-Management
HM-Ward-And-Bed-Management
HM-Theatre-Management
HM-Healthy-Person-Stay-Mgt
HM-Materials-Mgt
HM-Catering
HM-Nurse-Mgt

PM-Patient-Management
PM-Patient-Administration
PM-MPI
PM-Admissions-Discharges-Transfers
PM-Referral-Management
PM-Inpatient-Management
PM-Outpatient-Management
PM-Patient-Billing
PM-Care-Management
PM-MRT

CL-Clinic-Management
CL-Clinic-Scheduling
CL-Maternity
CL-Burns-Ctr
CL-Cardiology
CL-Fertility
CL-Paediatric
CL-Dialysis
CL-Pain-Ctr
CL-Spine-Ctr

DG-Diagnostics
DG-Pathology
DG-Radiology
DG-Bronchoscopy
DG-PACS

EN-Enablers
EN-Knowledge-Management
EN-Integration-Services
EN-Security-Services
EN-BPM
EN-Common-Components
EN-BRM
EN-Desktop-Letters

DM-Department-Management
DM-HR
DM-External-Relations
DM-Administration
DM-Technology-Operations
DM-Governance
What do we need to get there?

Seamless end to end approach to change

Organisational DNA
- Values
- Operating Model
- How We Will Compete
- Value Proposition

Organisational Decision Factors
- Heat Maps
- Balanced Scorecards
- Financial Analysis
- Business Capability Model with Containers

Investment & Prioritisation Framework
- “Making Informed Decisions”
- “Doing the Right Things”

Project Mgt Framework
- “Ensuring Smooth Execution”

Change Delivery Framework
- “Doing Things Right”

Deliver & Implement Process (D&IP)
- “Execute with confidence”

Conceptual Design Process (CDP)
- “Agility by Design”

Investment & Prioritisation Process (I&PP)
- 1st stage of prioritisation
- 2nd stage of prioritisation
- “Managing Our Project Portfolio”

Strategic Planning Process (SPP)
- “Making the strategy executable”

“Who we are, who we aren’t”

Strategic Planning Framework
- “Winning the game”

Business Transformation The Fragile to Agile Way
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Architecture Governance Framework
- “Keeping Everyone Honest”

IAF
<table>
<thead>
<tr>
<th>Strategic</th>
<th>Conceptual</th>
<th>Logical</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intent</td>
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Application centric encourages silos

Other Considerations
What do we need to get there?

Application centric environment exhibits the attributes above

<table>
<thead>
<tr>
<th>Product</th>
<th>Culture</th>
<th>Governance</th>
<th>Communication</th>
<th>Reward System</th>
<th>Skills</th>
<th>Overall Costs</th>
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<tbody>
<tr>
<td></td>
<td>Services</td>
<td>Builds assets for whole of organisation</td>
<td>Requires strong senior management to coordinate and support distributed effort</td>
<td>Requires service contracts</td>
<td>Rewards quality</td>
<td>Shared and lower long term costs</td>
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<td></td>
<td>Common goals</td>
<td>Shared values and greater trust</td>
<td>Corporate spirit, Teamwork</td>
<td>More complex</td>
<td>Rewards long term thinkers</td>
<td>Centres of excellence</td>
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<td></td>
<td>Agile</td>
<td>Builds assets for whole of organisation</td>
<td>Common goals</td>
<td>Requires service contracts</td>
<td>Rewards long term thinkers</td>
<td>Shared skills, knowledge</td>
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<td>Encourages self interest and singular goals</td>
<td>Encourages self interest and singular goals</td>
<td>Contract based</td>
<td>Needs greater interpersonal skills</td>
<td>Rewards asset builders</td>
<td>Increased resource flexibility</td>
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SOA environment exhibits the attributes below

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SOA encourages collaboration

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What do we need to get there?

Agility Pyramid

How do we make it happen?

Agility by Design

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What do we need to get there? How do we make it happen?

Operating Model

Courtesy “Enterprise Architecture as strategy – creating a foundation for Business Execution” by Peter Weill, Jeanne W. Ross and David C. Robertson
What do we need to get there?
How do we make it happen?
What do we need to get there?

Agility

Pyramid

How do we make it happen?
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<th></th>
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<td>Financial Outcomes</td>
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• Westminster system of government – three parts
  • Legislature: Enterprise Architects - EA domain principles
  • Police Force: Solution Architects – Key part of change process
  • The Courts:

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<th>IAF</th>
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Business Architecture Board

Technical Architecture Board

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Key Shifts from Fragile to Agile

How do we make it happen?

<table>
<thead>
<tr>
<th>Fragile Inc</th>
<th>Agile Inc</th>
</tr>
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<tbody>
<tr>
<td><strong>Processes</strong></td>
<td><strong>How?</strong></td>
</tr>
<tr>
<td>• Processes embedded in applications &amp; static</td>
<td>• Processes extracted to BPM Tool &amp; dynamic</td>
</tr>
<tr>
<td>• BPM/Lean boundary unclear</td>
<td>• BPM/Lean boundary clear</td>
</tr>
<tr>
<td>• People based</td>
<td>• Role based</td>
</tr>
<tr>
<td>• Little or no process analytics</td>
<td>• Real-time analytics</td>
</tr>
<tr>
<td>• Unclear process granularity</td>
<td>• Clear process granularity</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td><strong>IAF, BCM, BPM</strong></td>
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<tr>
<td>• Structure based business</td>
<td>• Services based business</td>
</tr>
<tr>
<td>• Unclear service granularity</td>
<td>• Clear service granularity</td>
</tr>
<tr>
<td>• Static service provisioning</td>
<td>• Dynamic service provisioning</td>
</tr>
<tr>
<td>• Services embedded in applications &amp; monolithic</td>
<td>• Services are autonomous and the core design element</td>
</tr>
<tr>
<td><strong>Architecture</strong></td>
<td><strong>IAF, BCM, SOA</strong></td>
</tr>
<tr>
<td>• No EA/detached EA</td>
<td>• EA part of culture</td>
</tr>
<tr>
<td>• EA as IT only</td>
<td>• EA covers business &amp; IT</td>
</tr>
<tr>
<td>• EA as noun only</td>
<td>• EA as noun and verb</td>
</tr>
<tr>
<td>• Application-centric</td>
<td>• Service oriented</td>
</tr>
<tr>
<td>• No Target State or Roadmap</td>
<td>• Defined Target State &amp; Roadmap</td>
</tr>
<tr>
<td>• No Architecture Governance</td>
<td>• Governance bodies/processes</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
<td><strong>IAF, SOA, CDP, AGF</strong></td>
</tr>
<tr>
<td>• Unclear operating model</td>
<td>• Operating model drives Business and IT structure</td>
</tr>
<tr>
<td>• No clear definition of competitive advantage(s)</td>
<td>• Competitive advantage(s) analysis drives behaviour</td>
</tr>
<tr>
<td>• Unclear how to make strategy executable</td>
<td>• Strategy drives execution</td>
</tr>
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Summary

• IT environment “noun and verb” has reached the “alcoholic moment” point in most organisations where just continuing as we are is no longer an option
• It is now possible to design and implement a materially more agile organisation that delivers a step change in agility; efficiency; cost to income ratio; customer service and ability to adopt new technologies rapidly
• There are no technology blockers or “vapourware” in this, it is now “only” a matter of appropriately governed execution
• You need to understand what the nirvana target state for your organisation’s IT looks like, in particular in terms of the ideal level of modularisation. You will probably never get there but you have to know what it looks like to make properly informed decisions
• You then need to deliver a roadmap to the target state and continually maintain it as tactical imperatives will require detours
• Enterprise Architecture is a mandatory discipline to define and map the journey to the more agile version of your organisation – an accidental architecture will not work
• If you are doing EA without a Business Capability Model you are just doing a subset – Enterprise Technology Architecture” and you will always struggle to get true business buy-in to your EA endeavours
• Not all BCMs are created equal – particularly if you wish to use it for deep technical design as well as business consulting
• If you have adopted BPM/SOA and do not have a BCM, with Service Containers, your efforts will deliver incremental improvement at best and will not be cost justified