Drinking our own champagne

Using TOGAF™ to architect
The Open Group’s systems
Enterprises join a Council
You join a Forum
Consensus process
Elected roles
There is a professional body
It’s Silver, Gold, Platinum

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The Open Group in a Boundaryless world

Finite resources

Lack of investment capital

Increased Operational risk

Growing Security threats

Growing Compliance issues

New Products & Entities

Develop Existing staff

Seek member support

Quest for low cost solutions

Maintain legacy until alternative in place
## Achievements .... so far

<table>
<thead>
<tr>
<th>What</th>
<th>Benefits</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replaced obsolete finance system</td>
<td>Reduced risk</td>
<td>Enhanced capability being rolled out</td>
</tr>
<tr>
<td></td>
<td>Reduced effort</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improved readiness for SOX compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhanced capability</td>
<td></td>
</tr>
<tr>
<td>Outsourced credit card handling</td>
<td>PCI Compliance</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>Reduced security vulnerability</td>
<td></td>
</tr>
<tr>
<td>Off-sited servers</td>
<td>Reduced operational and security risk</td>
<td>Partial</td>
</tr>
<tr>
<td>CRM</td>
<td>Ability to deliver individual membership</td>
<td>AOGEA live</td>
</tr>
<tr>
<td></td>
<td>New event registration system</td>
<td>Membership live</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Event registration in beta</td>
</tr>
<tr>
<td>CMS</td>
<td>Ability to federate web site content updates</td>
<td>Undergoing pilot</td>
</tr>
</tbody>
</table>

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How we do architecture

- Documentation strategy
  - Corporate intranet
  - “Plato” site
- Guidance from members
  - Chris Greenslade
  - TOGAF
  - Chris Armstrong
  - UML, BPMN
How we do architecture

- Framework and Principles
  - Framework Definition
  - IT Governance
Operating model

- Highlights the operational services and the phase of migration in which they would be addressed
- Facilitates federation / parallel activity in a governed manner
- Avoid the centralized activity bringing everything else to a halt
Principles

- Based on TOGAF model
  - Title
  - Statement
  - Rationale
  - Implications

- Developed by Internal Architecture Board
  - Business continuity
  - Custodianship
  - Citizenship
  - Anyplace, anytime
  - Self-serve (gas pump)
  - One source
  - De-customization
  - Preference for standards
  - Painless user experience

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# Phase A - Vision

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
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<tbody>
<tr>
<td>Outputs from Preliminary Phase</td>
<td>Refined</td>
</tr>
<tr>
<td>Business priorities</td>
<td>Scope for this iteration</td>
</tr>
<tr>
<td>Business Constraints</td>
<td>Constraints</td>
</tr>
<tr>
<td>High level business scenario</td>
<td>Refined business scenario</td>
</tr>
<tr>
<td>Legacy architecture assets</td>
<td>Baseline &amp; Target Architectures</td>
</tr>
</tbody>
</table>
Business Goals and Drivers

- Business drivers and principles are critical
  - Constraints can get out of hand
  - You need experience to be SMART

Pilot everything
Statement of architecture work

Objectives & Priorities

Major milestones

GANTT
Business Architecture

Membership
Baseline & target

UML Use Case

Business Scenario

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Enterprise continuum - internal

- Legacy from early work
- A reference collection of enterprise architecture assets
- Continuously enriched
Enterprise continuum - external

- Best practices
- Technical reference model

Figure: III-RM - High-Level
Business Architecture

Business Processes

Business Services

Role Management Service

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Applications Architecture

Baseline

Gap analysis

Service interaction model
Data Architecture

Core data entities

Entity relationships

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Technology Architecture

<table>
<thead>
<tr>
<th>Platform</th>
<th>Internet</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system:</td>
<td>Mailing infrastructure:</td>
<td>Office tools:</td>
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<tr>
<td>UNIX (Solaris, AIX, HP-UX)</td>
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<td>MS Office - Word, Excel, PowerPoint, Project</td>
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<tr>
<td>Linux</td>
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<td>VISIO</td>
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<tr>
<td>Windows</td>
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</table>

<table>
<thead>
<tr>
<th>Databases:</th>
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<th>Web Production Design software:</th>
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<tbody>
<tr>
<td>MySQL, Oracle, Informix</td>
<td>Apache, Apache SSL</td>
<td>Dreamweaver, studio MX</td>
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<tr>
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<td>Adobe Indesign</td>
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<tr>
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<td>Adobe Photoshop CS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MS FrontPage</td>
</tr>
</tbody>
</table>

Baseline – Reading only

Target – data center only
Phase E:
Opportunities & Solutions

- Establish evaluation criteria
  - Relevant principles
  - Business goals and drivers
  - Painpoints
  - Cost
  - Ability to deliver architecture

- Evaluate
  - Solution selection against evaluation criteria
  - Evaluation Report and recommendations
  - Governance Review (go – no go – next steps)

- Results
  - Selected LAMP based CRM solution
Evaluation Report

Issues

Although the system has a lot of intuitive functionality, that functionality is not necessarily how we would ideally like it. For this reason we have had to implement some workarounds to the way that the underlying OSGi system is created. This is not an issue with the Association as we have managed to create workarounds. However, that is not to say that we have found all issues that might be found if we rolled this out to the corporate systems. Examples of the issues that he has found so far are:

- Addresses mandate that there is a postcode filled in. This is ok, but when we import data and there is no postcode then we would have to enter some dummy data. We can pre-enter something like ‘Please enter your postcode’ so that people know that they have to supply a postcode when they update their details.

Recommendation

There are several aspects of the OSGi CRm technology that could yield showstoppers and prevent its deployment in our corporate and association enterprise environments:

- SOA

OSGi implements an Remote Method Invocation (RMI) interface which exposes all OSGi. However, this does impose a requirement / constraint on the deployment of the CRm system in the enterprise environment. This restriction is that all applications accessing data in the CRm system and the CRm system itself must be located behind the same firewall.

Access Control

We need to see who is logging in system and only allow them access and views of the information they require. They logging in can view all the data tabs in the CRm system.

Scalability

We need to be able to load test / test load we deploy systems. We can’t afford to expend the effort and cost developing systems only to then discover they run at unacceptable levels of performance. Introduce this capability into our enterprise architecture.

Accounts Receivable

We have a requirement that the accounts receivable must be resident in the CRm system. There are no modules in the OSGi system that provide this functionality to our requirements. We need to develop this functionality so it is from the user viewpoint that this functionality is CRm driven. We also need to prove the trade-offs between the CRm technology and selected Finance system technology.

It is recommended these issues are resolved (without any shadow of a doubt remaining as to their eventual use in the enterprise architecture) and hence become firm project specific goals in the next pilot project.

It may be that we invest in training during the course of the next pilot project to help evaluate these major concerns.

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Phase F: Migration Planning

- **Challenge:**
  - The legacy Membership Database is host to 23+ applications and moving all of these simultaneously was considered to involve an unacceptable degree of risk.

- **Strategy to overcome challenge:**
  - Create a synchronization mechanism between the new CRM and the legacy Membership Database.

- **Architectural benefit:**
  - Maintains control of scope.
Phase G

- Implementation Governance
  - Ensure approvals are in place
- Architecture Compliance Review Template

![Architecture Compliance Review Template](image)
Pilot review and evaluation

Meeting Objectives

To review the evaluation of the OFBiz Pilot Project.
To agree next steps and priorities moving forwards...

Date

20th June 2007

Attendees

Steve Nunn (CDO - IT Governance)
Darren Hawley (EA Team)

Agenda

1. OFBiz Opentaps Evaluation Pilot
   Here we have re-engineered the Association System to use the OFBiz CRM system and added in the Membership Management. The evaluation, risks, issues and recommendations to be discussed.

2. Roll Out of OFBiz to live Association system

3. Next Steps - CRM / Finance System Integration (CRM Driven Accounts Receivable / Credit Control)

4. Other points for discussion
   - Payment Solution Pilot
   - Finance System Evaluation
   - CMS Selection and Pilot
   - IT Infrastructure off sites
   - Data Migration
   - Reporting Tool

5. Recap and agreement of next steps and priorities for July/August

Outcome / Actions

- CDO to take the recommendation and next steps from the OFBiz Evaluation Report and gain CEO approval to proceed as per the Next Steps.
- OFBiz will not be deployed on the live association system until the CRM / Finance pilot is complete. However, this decision will be reviewed if a substantial piece of new development is required, such as CPD.
- CDO to assign effort to the Reporting Tool Business Case.
- The EA Team to pilot the Payment System using the Budapest Conference.
- By July 4th the EA Team are to complete the CMS selection and present a pilot plan for approval to the COO.
- The COO is to submit the business case for off sites in the US to the CEO by 4th July.
- The EA Team to propose OFBiz training for approval to the COO by 27th June.
- The EA Team to propose a load / performance test / analysis tool with costs to the COO by 18th July.
- The EA Team to feed the RM / Firewall requirements into the Data Migration Strategy.
Requirements Management

Application “owner”

Initial prioritization by end user

Principles filter for enhancements

Appeals process

Phase H: Architecture Change Management

Bug / enhancement validation

Constraints check

Findings reported to BU VP

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Phase H
Architecture Change Management

Request for Architecture Change

1. File request for architecture change
   - Change identified
   - Change initiator
   - IT Governance
   - Further action
   - Rejected
   - Approved

2. Sanity check
   - Rejected
   - Approved

Close change request

Revision History:

<table>
<thead>
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<th>Date</th>
<th>Version</th>
<th>Comments</th>
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</thead>
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</tr>
<tr>
<td></td>
<td></td>
<td>Sanity Check of architecture change completed</td>
</tr>
<tr>
<td></td>
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<td>Request for Architecture work added</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Approval/Rejection to make delivery of architecture work completed</td>
</tr>
</tbody>
</table>
Key challenges

- **Live within existing resources**
  - No budget to:
    - Hire or contract staff for the activity
    - Invest in architecture tools

- **Business goal**
  - Develop existing staff
    - Recognize that lack of prior experience is an acceptable trade-off

- **Business reality**
  - Give priority to revenue related work
    - Recognize that architecture work will often be put back
    - Insufficient resources to complete every detail of the ADM
  - Life goes on
    - The world does not stand still while we do this
    - Stakeholders have day jobs
TOGAF Benefits

- Forces you to think at all levels / phases
  - Avoids the leap to solution space
  - Prevents build when buy is better
  - Prevents “fixes” that have unforeseen consequences

- Encourages re-use
  - Legacy systems all had different registration processes
Challenges to a small enterprise

- Access to affordable expertise
- Access to affordable architecture tools
- Access to examples, sample materials etc

We could not have achieved half of what we have, without TOGAF to guide us.
BACK-UP
Cube of complexity

Intangible nature

Commonly understood

Tough to explain

Business model

For profit

Non profit

Broad

Global coverage

Narrow