企业架构案例研究

饮我们自己的香槟——使用 TOGAF™ 架构化 The Open Group 应用系统



Allen Brown

President & CEO

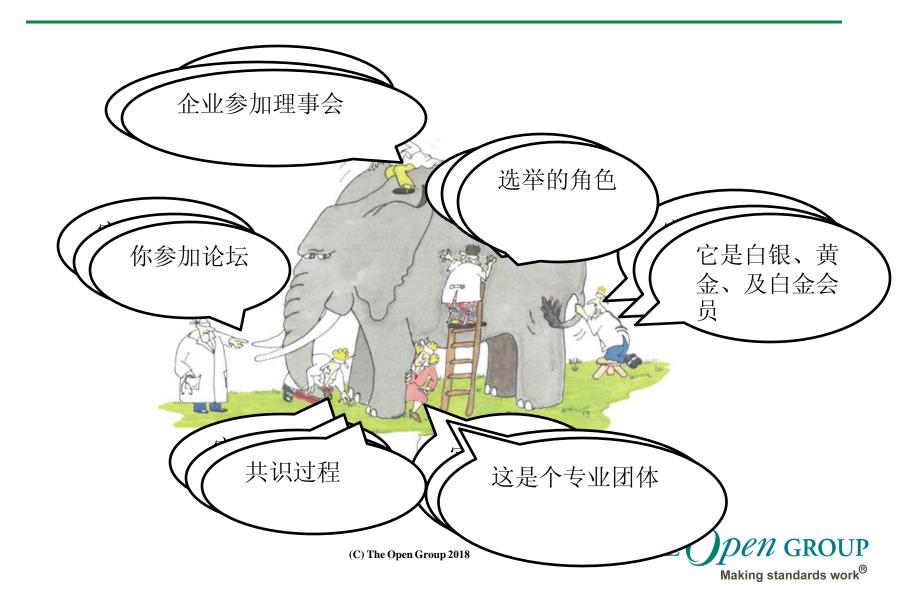
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The Open Group 业务分析

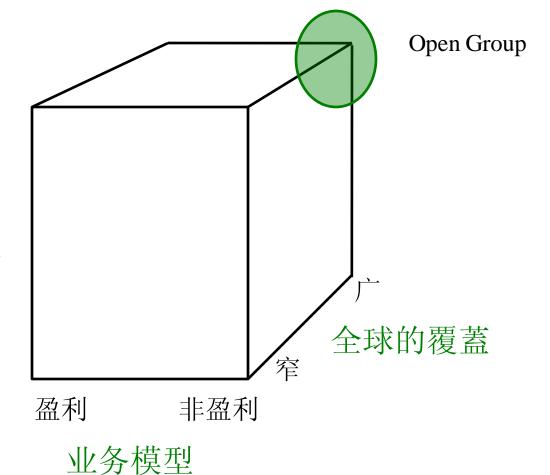


业务复杂度立方体

难以解释

不易度量的特性

普遍理解





The Open Group 在无边界的世界

增加的运营风险 发展现有员工 寻找会员支持 成长的安全威胁 有限资源 缺乏投资资本 成长的合规问题 追求低成本解决方案 维持遗留系统直到替代方案 新产品和实体 在适当的位置



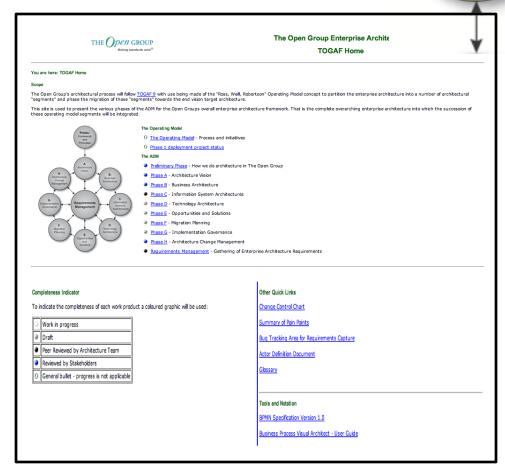
目前的成就

什么	收益	状态
替换陈旧的财务系统	降低风险 降低工作量 改善沙宾法案(SOX)合 规的准备就绪 加强能力	加强的能力正在推出
外包信用卡处理	付款卡行业(PCI)合规 降低安全弱点	完成
异地服务器	降低运营和安全风险	部分
客户关系管理 (CRM)	交付个人会员资格的能力 新事件注册系统	AOGEA协会上线 会员资格上线 事件注册(beta測試)
内容管理系统 (CMS)	网站内容更新结成联邦的能力	进行试点

我们如何实行架构



- □ 文件记录策略
 - 公司内部网
 - "Plato"软件
- □ 会员指导
 - Chris Greenslade
 - TOGAF
 - Chris Armstrong
 - UML, BPMN



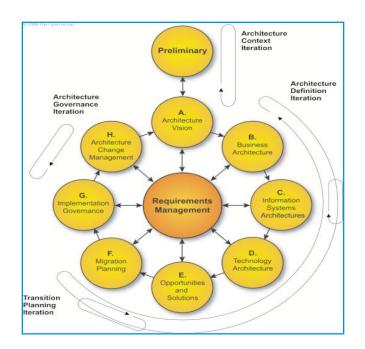


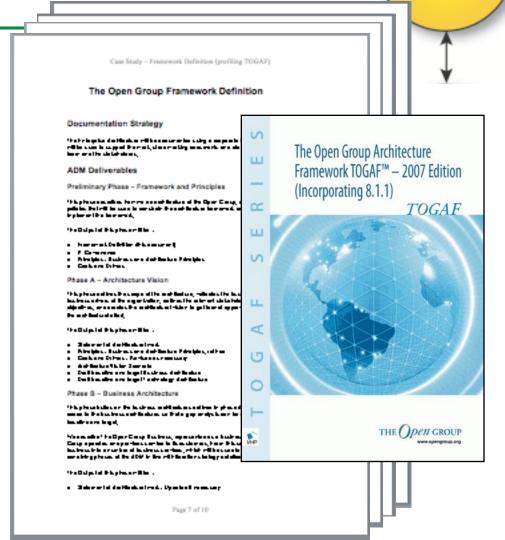
我们如何实行架构

Preliminary

□框架和原则

- 框架定义
- IT 治理



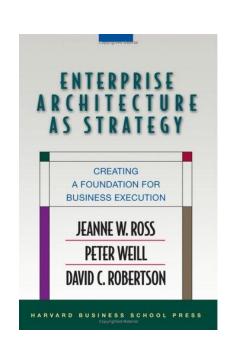


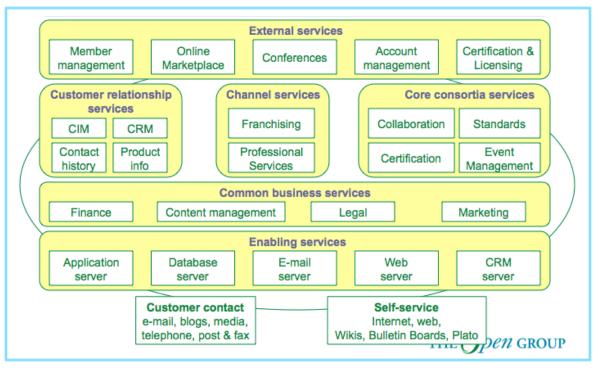
THE () pen GROUP

运营模式

Preliminary

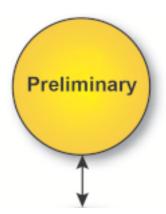
- □ 强调运营服务和将处理它们的迁移阶段
- □ 促进联盟/平行活动,在治理方式
- □ 避免可能导致其他活动停止的集中式活动



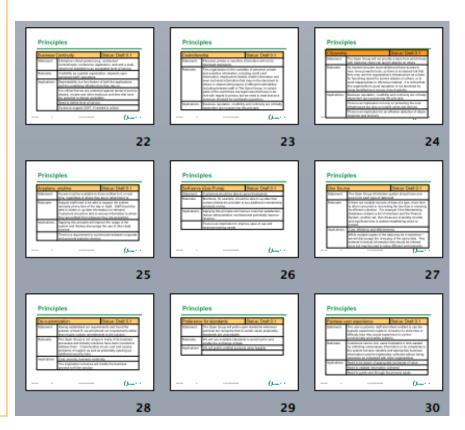




原则



- 基于 TOGAF 模型
 - 名称
 - 声明
 - 理由
 - 含义
- 由内部架构委员会发展
 - 业务连续性
 - 保管人職位
 - 公民身分/義務
 - 任何时间,如何地点
 - 自助服务(汽油泵)
 - 単一来源
 - 去-定制化
 - 标准优先
 - 无痛客户经验



阶段A-愿景

输入	输出
预备阶段的输出	提炼的预备阶段的输出
业务优先顺序	这次迭代的范围
业务约束	约束
高级别业务场景	提炼的业务场景
遗留架构资产	基线和目标架构



业务目标和驱动力

The Open Group Strategy

1 Executive Summary

The Open Group is organized along two lines of activity:

- o The Open Group Consortium, delivering value to its members
- o The Open Group Collaboration Services, delivering value to other consortia

The Open Group strategy, for practice described in the Harv Earth Plans by V Kasturi Rang mission of The Open Group t

The Boundaryless Information first step and is broad and far need. Its significance can only sense intended by Peter Druck to be made. The next step is the Group in realizing that vision critical success factor for mar The Open Group. Working w critical to achieving the delive processes in the industry, and to customer confidence and m

The third step is the strategy four critical components: clie development and delivery, fur development, and organizatio

The final step is the programs Conservancy may address the invasive species, and so forth Boundaryless Information Flo

Business drivers

- Develop capability
 - Certification of individuals new
 - Accreditation of corporate entities new
 - Franchising The Open Grou
 - Professional association r
- Replace obsolete systems
 - Finance system no longer
 - Membership database three
- Reduce operational and secu
 - Aging infrastructure
 - Dependence on individual k
 - Increased external threats
- Compliance
 - Credit card handling
- Staff development
 - TOGAF knowledge and corr

- □ 业务驱动力和原则是关 键的
 - 约束可能变成无法控制
 - 你需要有 发展SMART 需 求的经验

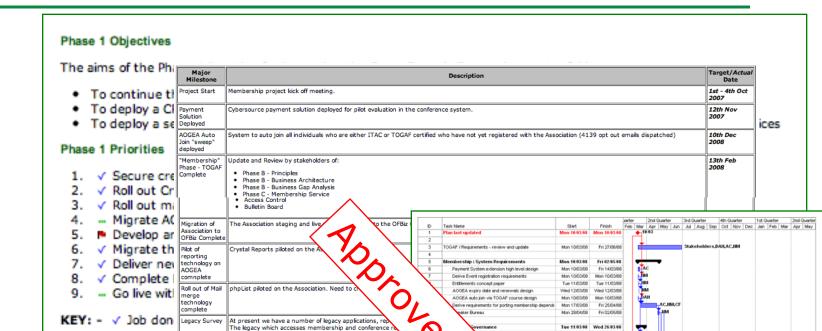
SMART objectives

- By end of --/-- we will have enabled a self-service system for customer order processing and fulfillment of any price-listed product
- On the road to this we will:
 - Before the -- conference we will have made a temporary, workable fix to the way we handle credit card information.
 - By end of -- we will have a view of the Enterprise Architecture so that we can make investment decisions by priority.
 - By mid --/-- we will have committed to a new Finance System as a part of executing on that Enterprise Architecture
 - By the -- conference we will have an alternative (perhaps temporary) conference registration system in place
 - By end of --/--we will implement a new ERP system and a new CRM system

□ 所有需求都要试点



架构工作说明书



ne Request Process

d Form (Internal)

ication template

cess Roll Out

integrate with focal point

add entry point for receipt generation

Association : Migrate to OFBiz and Data Center

Set up staging mysql with mysql1.5.x

Set up production mysal with mysal1.5.3

Set up productiong CRM (OFBiz 1.0) Migrate Sugar to Ofbiz 1.0

Set up staging CRM (OFBiz 1.0)

Thoroughly test Staging system

Migrate data to staging

Sanity Test

Partner

Chapte SIG

18 back /

Migrate data to production

Association : Back Office Modules

Update from 0.94 to 1.0

23

39

42

43

45

nge Order process

Authority/Implementer spreadshee

ate internal change request process in Bugzill

Tue 11/03/08 Tue 11/03/08

Med 120300 Wed 120300

Tue 18/03/08 Wed 19/03/08

Thu 20/03/08 Wed 26/03/08

Thu 13/03/08

Mon 17/03/08

Fri 02/05/08

Tue 06/05/08

Wed 07/05/08

Thu 08/05/08

Thu 08/05/08

Tue 20/05/08

Fri 23/05/08

Mon 02/06/08

Wed 04/06/08

Fri 06.06/08

Fri 09/05/08

Fri 16/05/08

Tue 20/05/08

Fri 23/05/08

Fri 69/05/08 Mon 38/06/08

Mon 26/05/08 Wed 28/05/08

Fri 14/03/08

Thu 13/03/08

Fri 14/03/08

Mon 17/03/08

Mon 28/94/98

Mon 28/04/08

Mon 05/05/08

Wed 07/05/08

Thu 08/05/08

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Thu 15/05/08

Wed 21/05/08

Mon 26/05/08

Mon 02/06/08

Thu 05/06/08

Fri 09/05/08

Mon 12/05/08

Mon 19/05/08

Wed 21/05/08

Thui 2005 DO

Tue 03/06/08

DAH

DAH

DAH

the CRM system. A, mainly automated, survey will be compl

The Membership and Conference Registration System residing

Design and development of the scripts to transfer membership

load in the staging environment. Make data available for Crystal

All legacy applications that accessed the membership system.

Completion and agreement of the end design specification

Go live at the data centre with the Association applications.

New Membership System and conference registration system

Install Drupal and evaluate CMS, Blog, BB and other aspects of

Go live of the new Membership System and conference registral

· Evaluation and trialing of technologies

· Pilot solution on the Association system

egacy to new CRM system

testing by stakeholders.

acceptance testing

Membershin

released on

System

Staging

Informix

Legacy

ready

nilot

Deploy

Release

(Q4/08)

Ready for

Complete

Phase 1 Live

testing

accentance

Association

maintenance

membership

data to CRM

Applications

Complete

Authentication

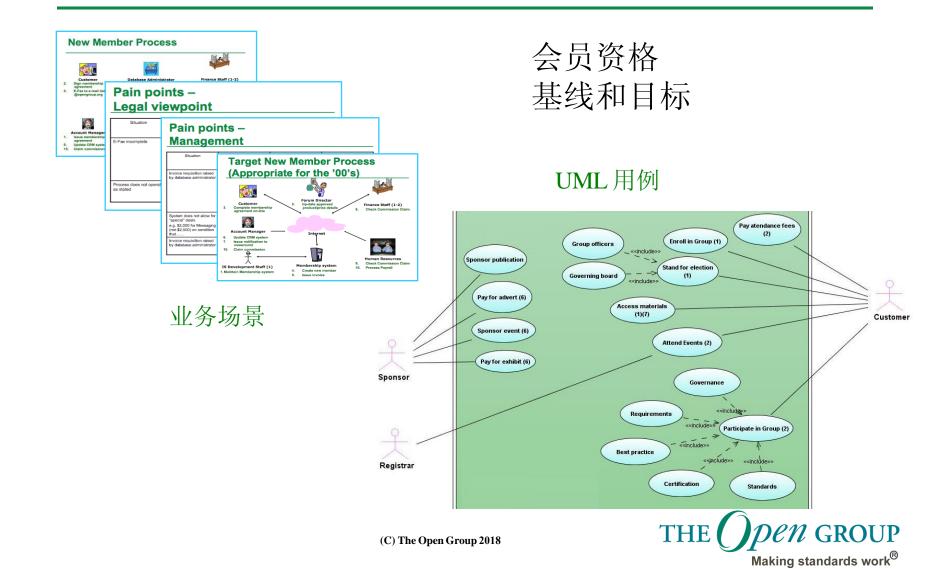
entitlements

目的和优先顺序

GANTT时程表

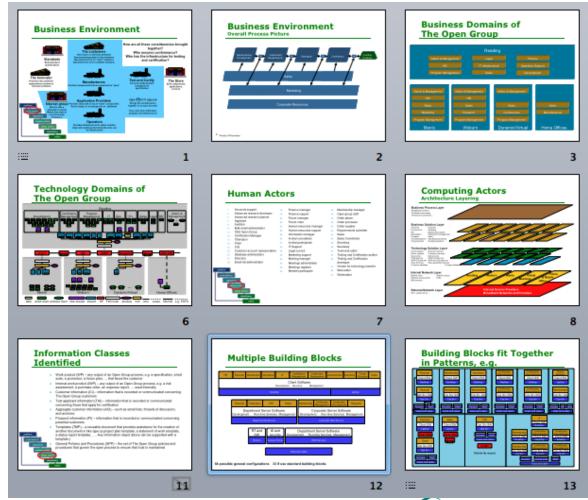
主要里程碑

业务架构



企业连续系列—内部

- □ 早期工作的遗 留案例
- □ 参考性企业架 构资产的收集
- □持续地加强



企业连续系列—外部

- □最佳实践
- □ 技术参考模型

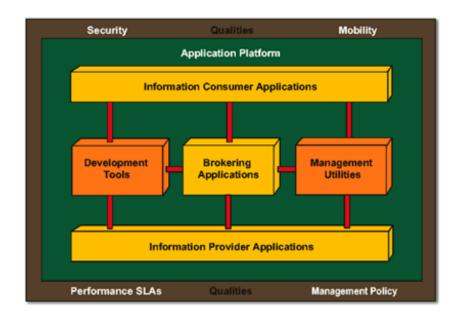


Figure: III-RM - High-Level

v. 1.0

Online Registration Best Practice

What will the user see?

The registration process will be broken down into a series of manageable screens to allow the user to enter their registration data.

Where the system already knows the data that should be present in a field it will automatically occulate that field.

Where possible, fields will offer pick lists or guide the user to select from a list of known values rather than allow free exit entry. An example is their organisation. They should be encouraged to pick their organisation name from the vast selection already available in the Onen Ones database.

When entry is complete the registration system will allow the user to check all the details that have entered and no-edit as necessary. Once the user is happy with all the data they confirm their details and the workflow utilizing the ordine registration continues.

The user will have the option to go back and forwards between screens and change data without data being lost. There will be separate buttons provided for this navigation, in addition to three enrolled by the broscer.

The user will see breadcrumbs along the top of the screen, which tells them where they are in the steps of the registration process.

The screens will not be cluttered with help text. Although there can be a help icon which will open up help text in a separate window. Tool tips can be made available if appropriate (via the html Sie attribute).

Optionally each screen may have save facility. The save facility allows the user to save their data so they can return, re-edit and complete their registration later.

Implementation Constraint

The user interface for these new registration processes will not be developed in but technology. They will be developed using JEEs or LAMP technology. In some case this will mean that but files and japhing files will coexist, an example being conflication systems.

Look and Feel

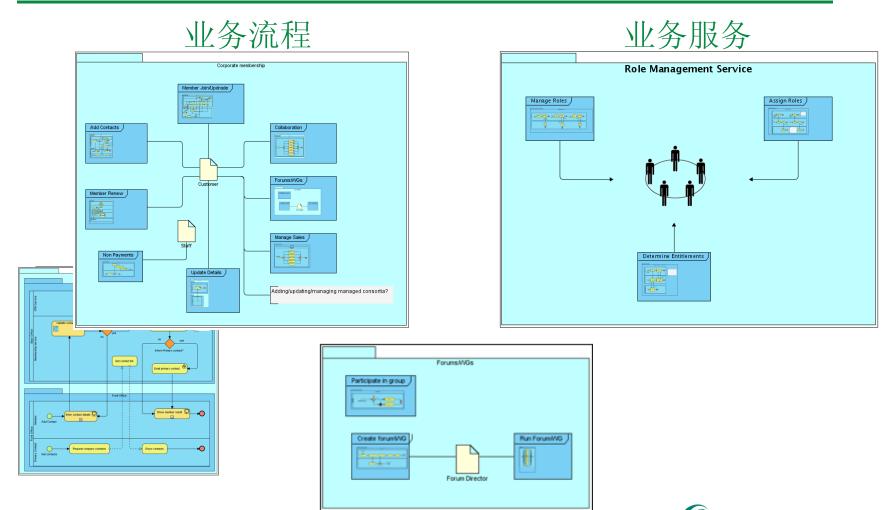
The registration process is used across the board, membership system, conference system, association system and certification systems to name a few. It is important that there is a consistent and corporate look and feel to the user interface components and controls used within the screens. The following user interface controls will therefore need a look and feel agreed with marketing and the webmasters.

- Breadcrumbs (indicating the current step in the registration process)
- Buttons (forwards, backwards, save, submit, re-edit and so on)
- Icons (such as links to help)
- Forms and other user controls (labels, text boxes, radio buttons, checkboxes, lists, solindles)
- Dialog Boxes, Windows (such as those popped up for help)

Page 2 of 2



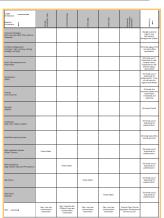
业务架构



应用架构

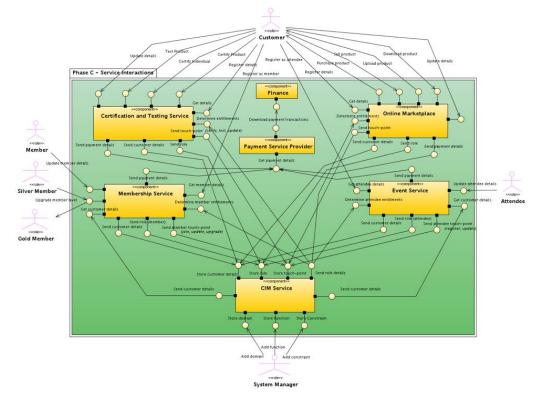
Open Group Servers	Open Group Applications	Client Applications - office
making yearnas secondaria	Buy Tracking System Conflocation Conflocation Conflocation System Conflocation Conflocation Conflocation Indicate Servy Hendromany Database Hendromany Database Hendromany Poption Mod State Register Mod Register Reg	Adose Acrobat Acrowed and spof Gouver's rest, Escal, Powspoint & Outbook MS Vise Open Office Peact Shop Pre
Client Applications - e-mail client	Client Applications - web browser	Client Applications - Security
Eudora Mutt Hush Thunderbird	Mozilla Findox browser Mozilla browser MS Internet Explaner	Norton Anti-virus
Client Applications - Web production Design Software	Server Applications - Development tools	Server Applications - Publication tools
Addos Blutster Addos Photehop Addos Photehop Addos Photehop HS Protectope HWI Protectop NVU Web Album Generator	Cvs Ccompilers Jave 5DK Ven	• graff • dode InDesign • CareDres
Applications - Connectivity	Server - Database programs	Server - Web application tools
ATES Televoris Closel ATES Televoris Closel ATES Televoris Closel Equation Figure Figu	NySQL SugerCRM	Apache Down Toncet
Applications - Misc	Server Applications - Misc	
House's colors Libed(in Libed(Google Calendar Bug rifa	

基线



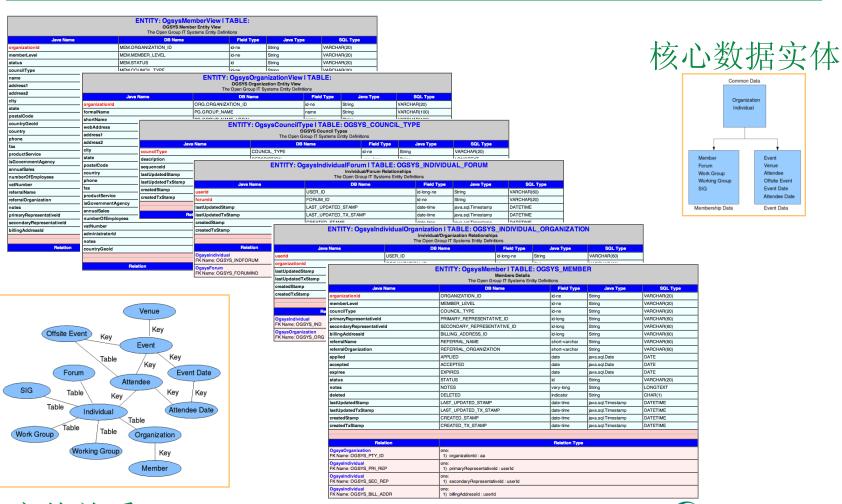
差异分析

服务交互模型





数据架构



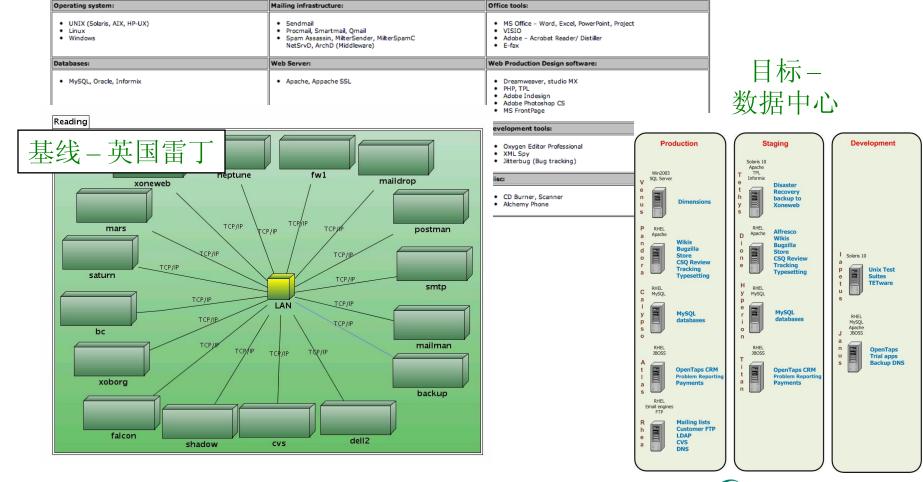
实体关系

THE Open GROUP

Making standards work®

技术架构

Platform



(C) The Open Group 2018

Tools

19

阶段 E: 机会和解决方案

- □ 建立评估准则
 - 相关原则
 - 业务目标和驱动力
 - 痛点
 - 成本
 - 交付架构能力
- □ 评估
 - 依照评估准则选择解决方案
 - 评估报告和建议
 - 治理审查(进行-不进行-下一步骤)
- □结果
 - □ 选择了基于LAMP (Linux, Apache, MySQL, PHP) 的 CRM 解决方案

De-customization		Status: Draft 0.1
Statement:	Having established our requirements and found the solution of best fit, we will amend our requirements rather than require custom amendments to the solution.	
Rationale:	The Open Group is not unique in many of its business processes and industry solutions have been invented to address them. Customization incurs cost and causes problems of support as well as potentially opening up additional security risks.	
Implications	Cost, security, business continuity.	
	The implication is that we will modify the business process to fit the solution	



评估报告

Evaluation Report

This document gives an evaluation report against the enterprise and project specific goals and objectives detailed in the QESS Courties. Plot Project Plan. This document also details the issues and risks with continuing to use this CRM technology in both the Association Enterprise and the Corporate Enterprise. This document concludes with recommendations and proposals for next stops.

Enterprise Level Goals

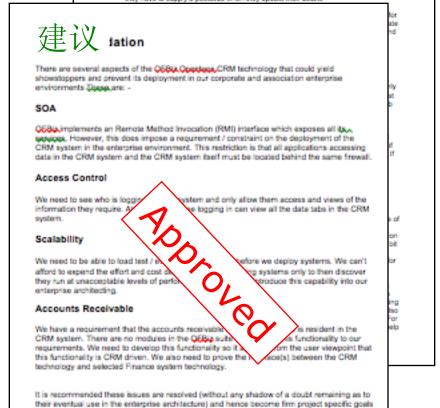
Evaluation Criteria	Evaluation Report
Our Systems shall be simple, professional and intuitive.	The system has been designed so that minimal training is required for users. The system uses standard web-based forms and controls that are familiar to the average internet user.
	The system has been designed to look professional from the user interface. Care has been taken to trap user errors and inform the user as to the cause of the problem and how to correct it.
	Interfaces have been designed to be as straightforward as possible using an unclustered approach, with on-screen messages to help direct the user where appropriate.
Reduce the amount of staff effort in using our systems	QCSq., allows staff to enter the system and change details from one application. There will not be the need for staff to enter the same information in two different places using two different applications for example.
	See below for one issue, that is only want a user to see the information relevant to them when they log in.
Remove dependencies	The pilot system has been developed from the ground up, with no dependences on the existing technology and systems.
	We have been careful to choose standard vendor-neutral open source solutions that rely on skill-sets that are freely available on the job marketplace. The development technologies are based around LAMP and Jana.
	The pilot system is not based on the Informix database, or the existing TPL programming language. The only existing dependency is that to check a member is TOGAF/ITAC

Page 1 of 10

问题

Although the system has a lot of inbull functionality, that functionality is not necessarily how we would ideally like it. For this reason we have had to implement some work a rounds to the way that the underlying OEEs anystem 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 need this out to the corporate systems. Examples of the issues that he have found so far are,

Addresses mandate that there is a postcode field in. This is ox, 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 datalis.



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

in the next pilot project.

these major concerns.

阶段 F: 迁移规划

- □ 挑战:
 - 遗留系统的会员资格数据库是23多个应用的管理系统,而且同时迁移这些应用被考虑为涉入不可接受的风险程度
- □ 克服挑战的策略:
 - 创建新CRM和遗留系统的会员资格数据库的同步机 制
- □ 架构收益:
 - 维持范围的控制



阶段 G: 实施治理

- □实施治理
 - 確保批准已到位
- □架构合规审查模板

Name of Project	Membership and Conference Registration System
Project Owner	Darren Hawley
Date of submission	19 Nov 2008
Criteria	Report
Ensure projects comply with organization specific development processes	This development project has complied with the Open Group's development team software engineering process.
Complies with the architecture principles	The CRM complies with all architecture principles
Meets the architectur pents placed upon it	A review meeting was convened to review and agree requirements. Screen shots meeting the requirements were produced and reviewed by keholders
\ 0	er interface prototype was

	· ·	ı
	A membership and conference registration test system was deployed in the staging environment and acceptance tested by stakeholders against the requirements	
Supports all the architecture migration strategy	The CRM system is being deployed in the enterprise architecture as defined in the Phase 1 migration strategy	

Approved	Steve Nunn (COO)
Date of approval	27 Nov 2008



and reviewed by stakeholders

concer registration test system was produced and reviewed by stakeholders

equirements

against the requirements.

试点审查和评估

会议目的 参加人员 议程

结果/行动



The Open Group Enterprise Architecture

OFBiz Opentaps Evaluation Pilot Review

You are here: TOGAF Home -> Phase E -> OFBiz Pilot -> OFBiz Pilot Review

Meeting Objectives

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

20th June 2007

Attendees

Steve Nunn (COO - 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 siting
 - Data Migration
 - · Reporting Tool
- 5. Recap and Agreement of next steps and priorities for July/August

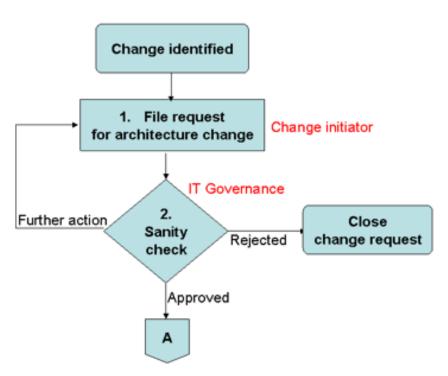
Outcome

- . COO 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.
- . COO 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-siting 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 RMI / Firewall requirements into the Data Migration Strategy.



阶段 H: 架构变更管理

架构变更要求





Architecture Change Request

[As you work through this document, feel free to remove these parenthesized instructions in blue font. Overwrite where the document guides you to "Write here"]

TITLE: [insert one liner to describe change - remember to update File -> Properties -> Title:] Write, here

CHANGE INITIATOR: [insert name - remember to update File -> Properties -> Subject:] V(qtg, here

REVISION HISTORY:

Date	Version	Comments
	0.1	Request for Architecture change completed
		Sanity Check of architecture change completed
		Request for Architecture work added
		Approvat/Rejection of architecture work completed
		Request to deliver architecture work
		Approvat/Rejection to make delivery or architecture work completed



需求管理



关键挑战

- □接受现有资源
 - 没有预算以:
 - 为任务聘雇或签约职员
 - 投资架构工具
- □ 业务目标
 - 发展现有职员
 - 认知缺乏以往的经验是可接受的权衡
- □业务现实
 - 给予收入相关的工作优先排序
 - 认知架构工作常常会被延后
 - 资源不足以完成架构开发的所有细节
 - 生活还是要继续
 - 当我们执行架构工作时,世界不会停止不动
 - 利益相关者有日常的工作



TOGAF 效益

- □强迫你在所有水平及阶段思考
 - 避免跳入解决方案空间
 - 避免开发, 当采购是较好方案
 - 避免有不可预测后果的"修正"
- □鼓励重用
 - 遗留系统都有不同的注册过程

