

An Enterprise Architect in the Modern World

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Moscow
17th October 2013



Agenda

Definition, timeline, key methods and approaches

What does a modern Enterprise Architect look like

Worldwide best practices and examples

How do the megatrends impact the Enterprise Architect and Enterprise Architecture

Definition

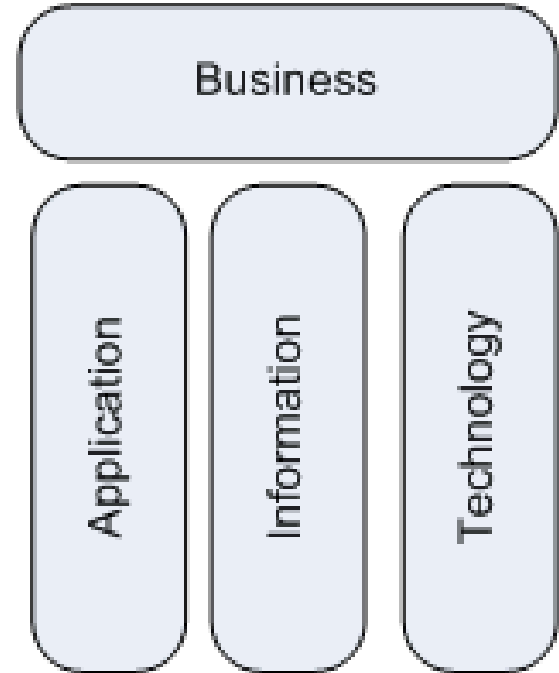
... the system in question is the whole enterprise, especially the business processes, technologies, people and information systems of the enterprise.

ANSI/IEEE 1471: The fundamental organization of a system, embodied in its components, their relationships to each other and the environment, and the principles governing its design and evolution.

Gartner: "Enterprise architecture (EA) is a discipline for proactively and holistically leading enterprise responses to disruptive forces by identifying and analyzing the execution of change toward desired business vision and outcomes. EA delivers value by presenting business and IT leaders with signature-ready recommendations for adjusting policies and projects to achieve target business outcomes ..."

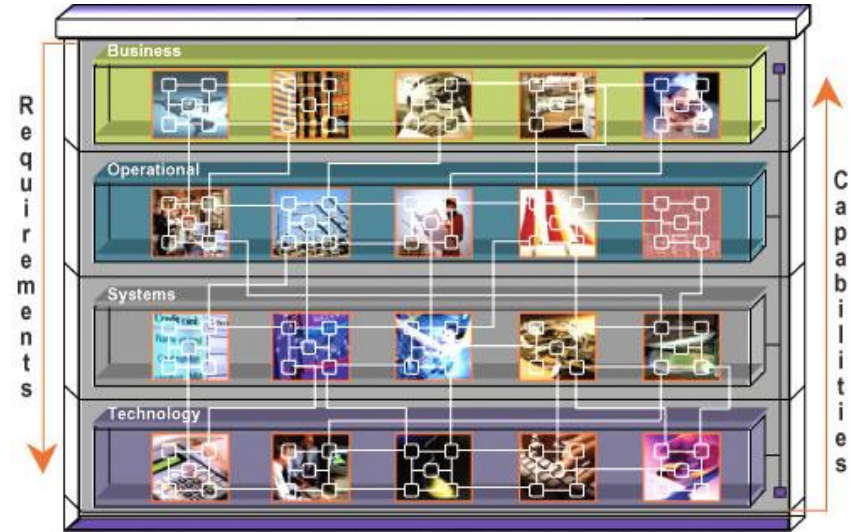
IT view

Business
Architecture
Information
Technology



Business view

Business
Operations
System
Technology



Top Four

A Comparison of the Top Four Methodologies

Many enterprise-architectural methodologies have come and gone in the last 20 years. At this point, perhaps 90 percent of the field use one of these four methodologies:

Zachman, FEA, TOGAF, process centric (ie Gartner)

<http://msdn.microsoft.com/en-us/library/bb466232.aspx>

Roger Sessions, ObjectWatch, Inc., May 2007

History

Framework becomes Process

Zachman's first article/
OO Programming

TAFIM released

Clinger/Cohen Bill passed
Distributed Objects

TAFIM retired

FEAF 1.2 released

FEA replaces FEAF
SOAP introduced

TOGAF 8.0 "Enterprise Edition Released

FEA mostly complete

87

94

96

9899

02 03































06

Zachman

The Zachman Framework for Enterprise Architectures

Although self-described as a framework, is actually more accurately defined as a Taxonomy

A FRAMEWORK FOR ENTERPRISE ARCHITECTURE TM

	DATA <i>What</i>	FUNCTION <i>How</i>	NETWORK <i>Where</i>	PEOPLE <i>Who</i>	TIME <i>When</i>	MOTIVATION <i>Why</i>	
SCOPE (CONTEXT)	List of Things Important to the Business  Planner Entity = Class of Business Thing	List of Processes the Business Performs  Process = Class of Business Process	List of Locations in which the Business Operates  Node = Major Business Location	List of Organizations Important to the Business  People = Major Organization Unit	List of Events/Cycles Significant to the Business  Time = Major Business Event/Cycle	List of Business Goals/Strategies  Ends/Means = Major Business Goal/Strategy	SCOPE (CONTEXT) Strategist
BUSINESS MODEL (CONCEPTS)	e.g. Elements Model  Owner Ent = Business Entity Rel = Business Relationship	e.g. Business Process Model  Proc = Business Process IO = Business Resources	e.g. Business Logistics System  Node = Business Location Link = Business Linkage	e.g. Work Flow Model  People = Organization Unit Work = Work Product	e.g. Master Schedule  Time = Business Event Cycle = Business Cycle	e.g. Business Plan  End = Business Objective Means = Business Strategy	BUSINESS MODEL (CONCEPTS) Executive Leaders
SYSTEM MODEL (LOGIC)	e.g. Logical Data Model  Designer Ent = Data Entity Rel = Data Relationship	e.g. Application Architecture  Proc = Application Function IO = User Views	e.g. Distributed System Architecture  Node = IIS Function (Processor, Services, etc.) Link = Line Characteristics	e.g. Human Interface Architecture  People = Role Work = Deliverable	e.g. Processing Structure  Time = System Event Cycle = Processing Cycle	e.g. Business Rule Model  End = Structural Assertion Means = Action Assertion	SYSTEM MODEL (LOGIC) Architects
TECHNOLOGY MODEL (PHYSICS)	e.g. Physical Data Model  Builder Ent = Segment/Tabelle Rel = Pointer/Key/Ref	e.g. System Design  Proc = Computer Function IO = Data Elements/Data	e.g. Technology Architecture  Node = Hardware/Systems Software Link = Line Specifications	e.g. Presentation Architecture  People = User Work = Screen Format	e.g. Control Structure  Time = Execute Cycle = Component Cycle	e.g. Rule Design  End = Condition Means = Action	TECHNOLOGY MODEL (PHYSICS) Engineers
DETAILED REPRESENTATIONS (OUT-OF-CONTEXT)	e.g. Data Definition  Sub-Contractor Ent = Field Rel = Address	e.g. Program  Proc = Language Statement IO = Control Block	e.g. Network Architecture  Node = Address Link = Protocol	e.g. Security Architecture  People = Identity Work = Job	e.g. Timing Definition  Time = Instant Cycle = Machine Cycle	e.g. Rule Specification  End = Sub-condition Means = Step	DETAILED REPRESENTATIONS (OUT-OF-CONTEXT) Implementors
FUNCTIONING ENTERPRISE	e.g. DATA	e.g. FUNCTION	e.g. NETWORK	e.g. ORGANIZATION	e.g. SCHEDULE	e.g. STRATEGY	FUNCTIONING ENTERPRISE

© 1986 - 2008 John A. Zachman, Zachman International

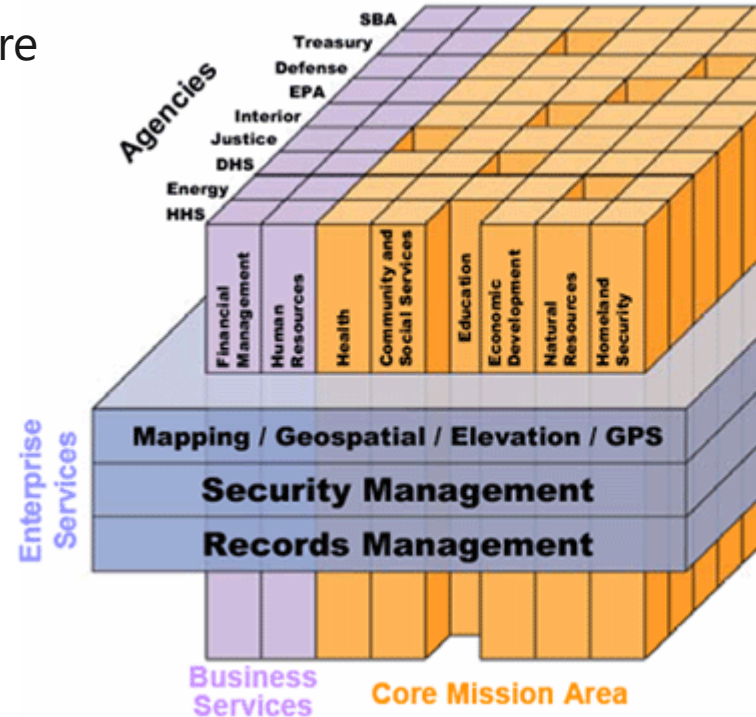
See www.ZachmanInternational.com for the latest Zachman Framework graphic.

FEA

The Federal Enterprise Architecture

Can be viewed as either an implemented enterprise architecture or a proscriptive methodology for creating an enterprise architecture

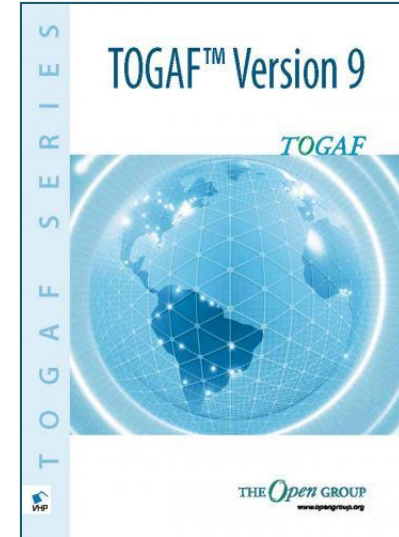
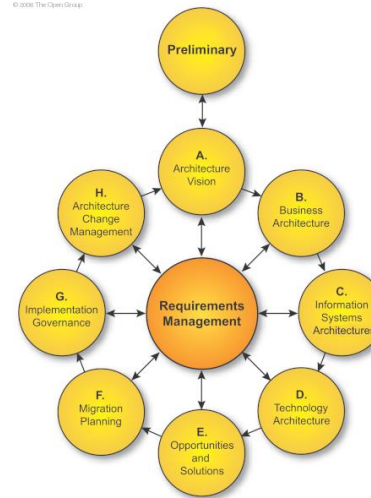
Federal Enterprise Architecture [FEA]



TOGAF

The Open Group Architectural Framework (TOGAF)

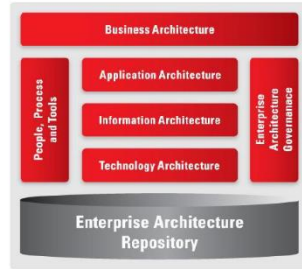
Although called a
framework, is actually
more accurately
defined as a Process



Many
more
models

ORACLE

Oracle Enterprise Architecture Framework

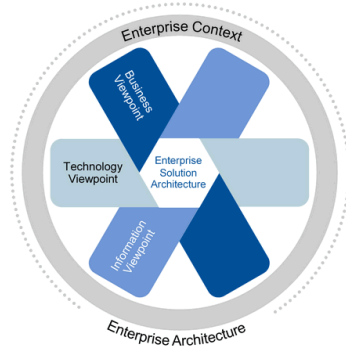


Oracle goes to market with a team approach (EA's, SA's, information architects, database architects, etc.)

Accenture

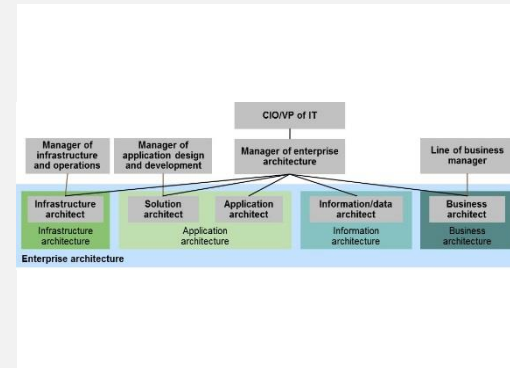


Accenture delivers a client-unique actionable plan and roadmap to leverage technology to focus on increasing productivity, reducing costs and increasing revenues



Gartner's definition of Enterprise Architecture spans end-to-end architecture services

GARTNER



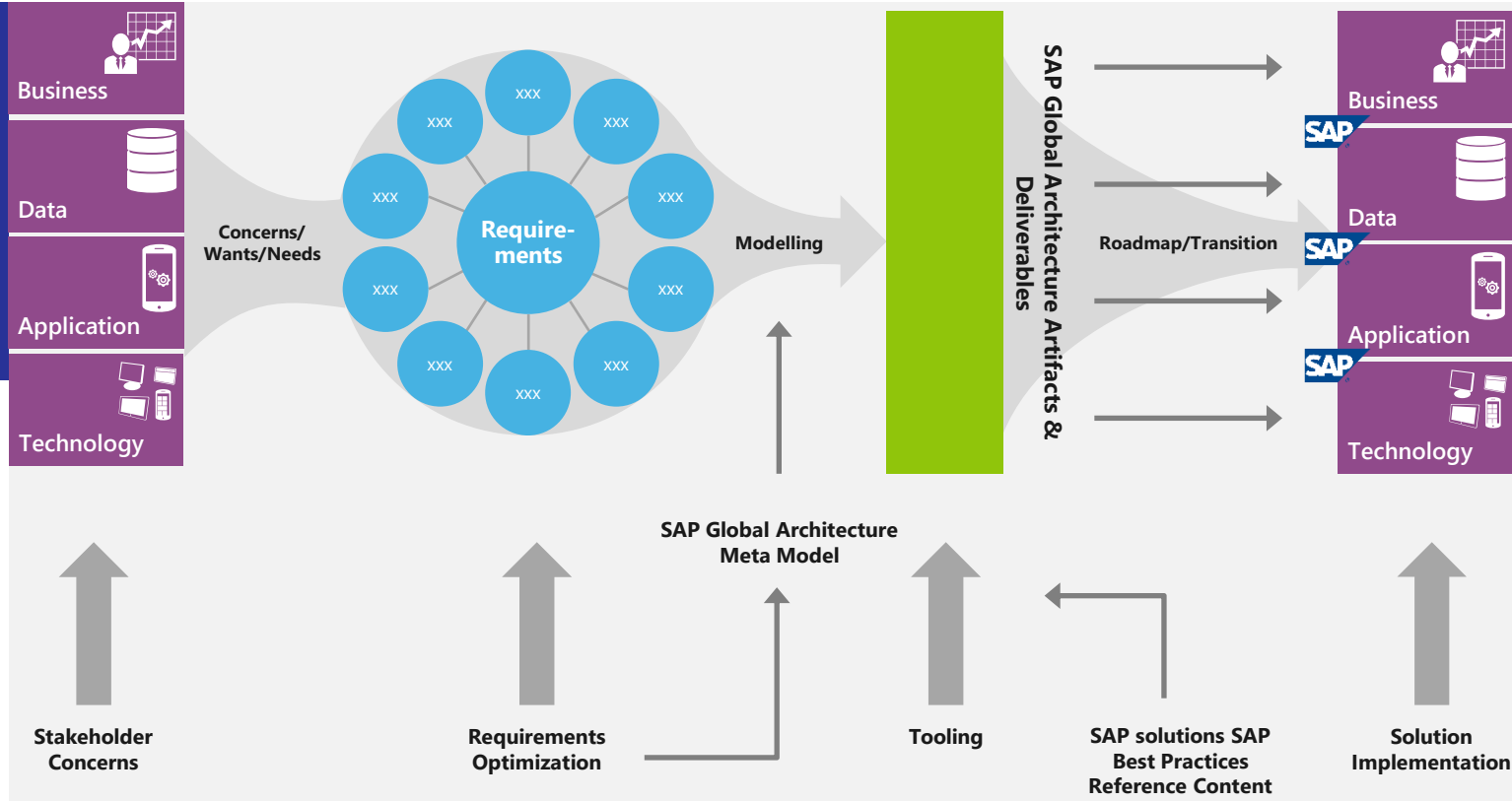
Forrester's enterprise architecture framework includes spans infrastructure, solution, application, information, and business architecture, managed end-to-end

FORRESTER

Evolution of SAP's Architecture Framework

	TOGAF	SAP EAF	SAP Architecture
Architecture Development Method	Capability driven architecture development method, focused on software development	Capability driven architecture development method, focused on SAP Solution deployment	Value driven architecture development method, focused on full exploitation of SAP (Next Generation) Solutions, Services and Content
Meta Model	Hybrid approach between software development and service architecture style	Hybrid approach between software development and service architecture style, supporting SAP Solutions using a SAP Taxonomy	Simple and robust meta model geared toward supporting the SAP Architecture Development Method
Accelerators and Artifacts	Generic templates	Features SAP specific narratives, templates and worksheets. These materials are included in the SAP ASAP 7.1 method.	Proven, architectural deliverables having cross-industry context to support re-use for solution design development and reference purposes

SAP Architecture Stakeholder Driven Method



2009: Microsoft Enterprise Architect

ENVISION & PLAN



ENTERPRISE
ARCHITECT

BUILD & DEPLOY



CONSULTING
SERVICES

OPERATE & OPTIMIZE



PREMIER ENTERPRISE
SUPPORT ARCHITECT

REALIZATION

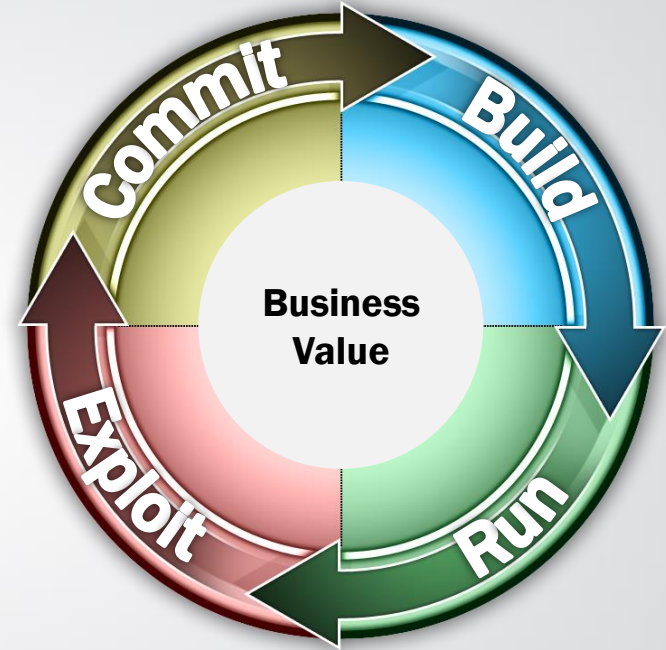
Example 1: Value focus

It did sound like *Canadian Bank* and Microsoft share many of the same challenges and opportunities with respect to the Enterprise Architecture practice. Let's review the training agenda with our internal team to assess potential fit.

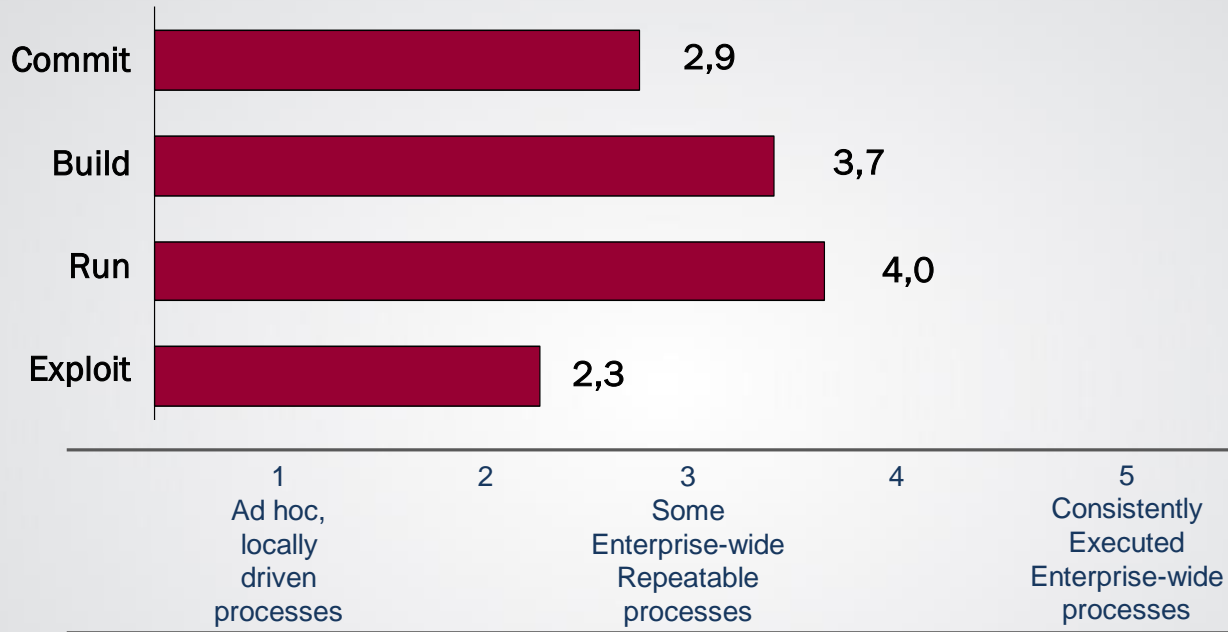
Day 1 - Team Forming & Academy Overview	Day 2 - Meet Your Sponsor	Day 3 - How MSFT Can Help	Day 4 - SDP for Engagement	Day 5 - Create a Compelling Plan	Day 6 - Realize and Report Value
Facilitator/Instructor Huddle	Facilitator/Instructor Huddle	Facilitator/Instructor Huddle	Facilitator/Instructor Huddle	Facilitator/Instructor Huddle	Facilitator/Instructor Huddle
Big Picture / Expectations Michael Fors	Big Picture / Pre-Sales Ben Keith	Big Picture / ATU VRF Assessment: Validate Ben Keith	Big Picture / Engagement Ben Keith	Big Picture / EAIP Paul Slater	Big Picture / Renewal VRF: Value Realization Ben Keith
Sponsor Context Setting Michael Fors	ESP Work Orders Christopher Swenson and Walter Delwein		ESN Network & Customer Connections Deepti Manne, Miha Kralj, and Michelle Strah	VRF: Initiative Planning Ben Keith	
Break	Break	Break		Break	Break
Welcome and Connection Walter Delwein	VRF Assessment: Context Ben Keith	VRF Assessment: Validate and Top Tools Ben Keith	Break VRF Assessment: Prioritize Ben Keith	VRF: Initiative Planning Ben Keith	VRF: Value Realization Ben Keith
Gridlock Activity Walter Delwein			Work Time	Work Time	Work Time
Lunch	Lunch	Lunch	Lunch	Lunch	Lunch

2012: The new value proposition emphasizes innovation and business value

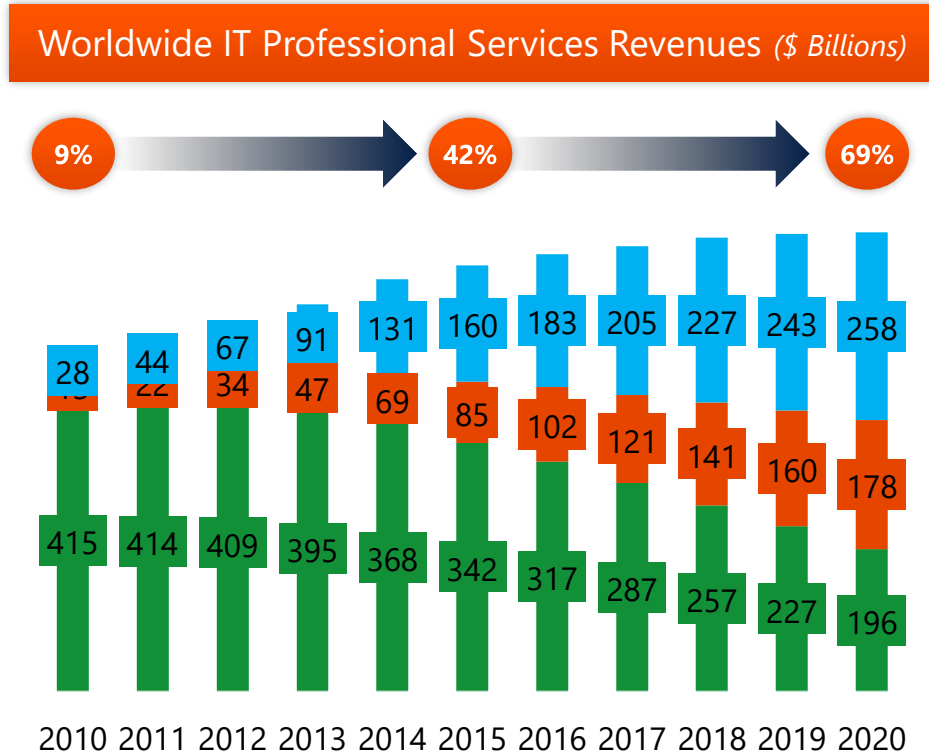
- **Building and leveraging platforms involves a value cycle rather than the traditional value chain**
 - **Commit:** allocating resources to address strategic priorities
 - **Build:** delivering new technology, process, and information-based capabilities
 - **Run:** ensuring reliable support of these capabilities
 - **Exploit:** generating ongoing business value from capabilities



IT Units are better at Run and Build than Commit and Exploit



Cloud approach reduces the need for Build and Run



Source: Forrester 'The Coming Upheaval in Tech Services', STB Oliver Wyman

COMMIT?
EXPLOIT?
BUILD?
RUN?

Cloud-related
Professional
Services

Public Cloud
Related

Private Cloud
Related

Traditional
On-Premise
Related

The cloud is
coming and it will
require significant
innovation in our
professional
services teams
Being able to
provide
professional
services in hybrid
scenarios is key.
We can't break
what works today.

"Not much left" in IT by 2015

Headcount in standalone IT roles will likely shrink to 25% or less of current totals by 2015 in organizations where the five shifts have taken full effect.

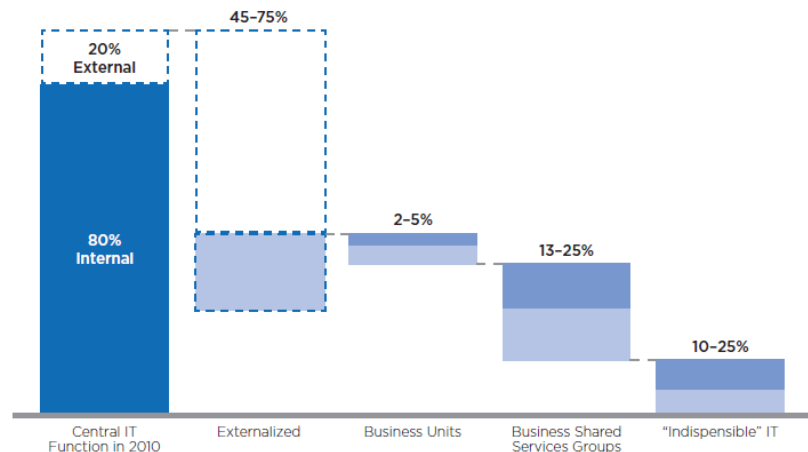
- In many cases, the number of staff in standalone IT roles will be less than those with responsibilities related to technology in the business shared services group.
- See the appendix on page 116 for full details of the analysis

INFORMATION TECHNOLOGY PRACTICE
www.executiveboard.com/IT

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NOT MUCH LEFT

Estimated Reallocation of IT Headcount at Progressive Organizations by 2015
As a Percentage of Total Central IT Headcount in 2010



Source: Analysis based on CIO Executive Board 2009 IT Budget Benchmark.

WHICH WAY
FORWARD?

FOUR INTERNAL
TRENDS

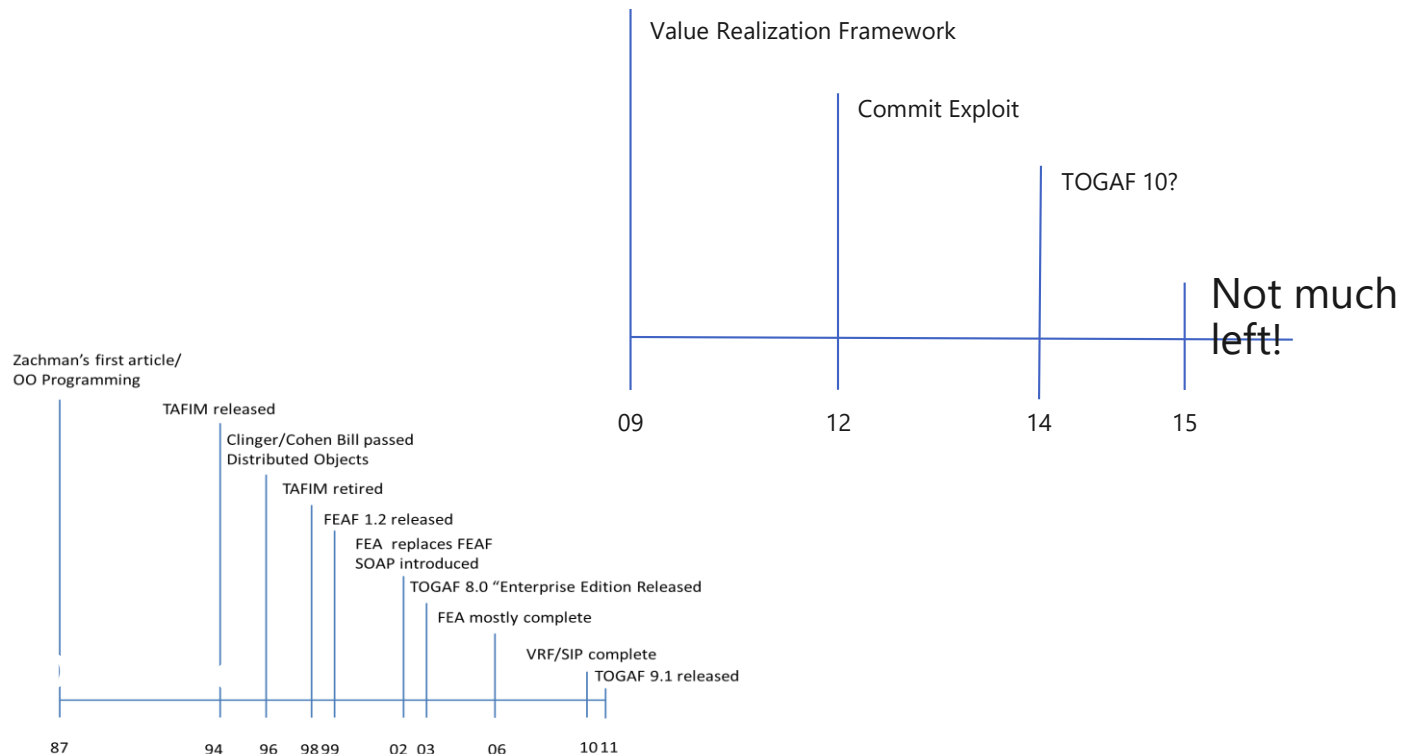
TEN EXTERNAL
TRENDS

THE FUTURE
OF CORPORATE IT

WHAT TO DO NOW?

Reboot ...

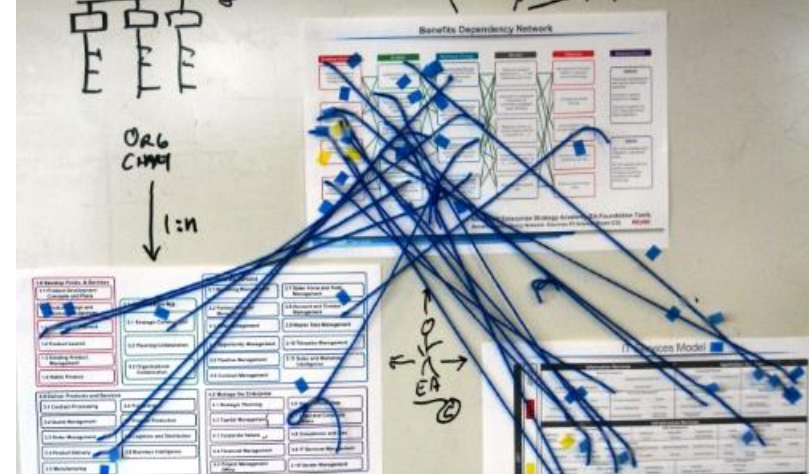
Value and Outcome driven EA



Example 2: Reboot!

Acknowledge that very large mining company Enterprise Architecture lacks maturity and formal methods.

Rebuild the practice using a value-based process to link Value, Business and IT using capability models.



VRF Enterprise Architecture Capability Model



Implications

Business
Outcomes



Lead
With
Cloud



Configure
Before
Customize



Solutions
Not
Products



What does
a Modern
Enterprise
Architect
look like?



Gartner suggest an Enterprise Architecture must become Business Outcome-Driven to deliver Value

Building a practice, we reset and created a simple way of understanding the minimum requirements for a modern Enterprise Architect, and how to assess against the formal role requirements.

Interview criteria, career guidance job descriptions all driven by four key skill areas.

Four core
skills for
Commit
& Exploit

BUSINESS UNDERSTANDING



LEADERSHIP & RELATIONSHIPS



ARCHITECTURE & TECHNOLOGY



CONSULTING METHODS

