Enterprise Architecture Roles in Delivering Business Capabilities

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Why Enterprise Architecture adoption now?

- **Laws and regulations**
  - US Clinger-Cohen Act & Sarbanes-Oxley in the US
  - EU Directives on the IT Award of Public Contracts

- **Current IT systems do not longer meet the needs of the business**
  - Fragmented, lack of response and many duplicated

- **Lack of Investment Values in IT i.e. Little or No ROI**
  - Budget often focussed on system maintenance

- **Chaotic Project Management Office**
  - Lack of skills, requirements, scope, resources, etc

- **Critical to business success**
  - Good information management = competitive advantage

- **The need in meeting enterprise expectations**
  - SLA (Service Level Agreement) and OLA (Operational Level Agreement)

Legend:
- Red: Negative Impact on Business
- Yellow: Short Term Impact on Business
- White: Sufficient Skills
- Gray: Do Not Know

Distribution of Responses
Enterprise Architecture Health Check as Good Indicator for Setting Up Enterprise Transformation Program ... Where are You?

Frozen in the past
- Operational & IT spending increases
- Limited access to information
- Little flexibility
- No IT agility
- IT delivers little business values

In the Abyss
- Uncontrollable operational & IT spending
- IT as Huge Cost Center
- IT in the Fire-Fighting Modes

Competitive
- IT Spending under control
- IT Supports business operation
- Effective new development
- IT Architecture blueprint in place
- IT Governance in place

Leading
- Business & IT Integration
- IT Architecture Framework in place
- Enterprise Architecture Organization (EAO) in place
- IT delivers Strategic Business values
- IT as Profit Center

IT in the Fire-Fighting Modes

Uncontrollable operational & IT spending

IT as Huge Cost Center

IT Governance in place

Effective new development

Effective new development

Business & IT Integration

IT Architecture Framework in place

Enterprise Architecture Organization (EAO) in place

IT delvers Strategic Business values

IT as Profit Center
IT Architecture Landscape based on F-T-S

F

IT Architecture **Frameworks** e.g.: TOGAF, DODAF, MODAF, FEAF, Zachman Enterprise Architecture Framework, etc

T

IT Architecture **Technologies** e.g.: IBM Technology, Cisco Technology, Oracle Technology, Microsoft Technology, Database Technology, Java & .NET Platforms, etc

S

IT Architecture **Skill Sets** by IASA and based on ITABOK i.e. IT Architecture Body of Knowledge
Components that Make Up Enterprise Architecture & EAO (Enterprise Architecture Office)
One of the Main Driver for EA Adoption is ..
Understanding the Business Requirements
The Outcome when Partial Fit of IT to the Business

Highest Technology Priority: Better Fit of IT to Business
Enterprise Challenges ... Too many Islands of IT Systems & Huge Cost to the Business
Yet, Another Enterprise Challenge... Absence of IT Architecture Practices & Strategic Integration

Business Strategy:
- Not promises
- Not about What to do
- Focus on How to do
- Have execution plan
- Continues validation and verification

Yet, Another Enterprise Challenge... Absence of IT Architecture Practices & Strategic Integration

Business IT Architecture Series ASIA 2013
Business & IT Model with Little Integration

- Business drives IT projects
- Solutions impose constraints to business
- Business siloed by IT
- Inward technology driven view

BUSINESS
- Finance
- Logistics
- Apps

Technology model
- System
- Server
- Mainframe
- DB
- Applications
Fully Integrated Business & IT Model through Enterprise Architecture Adoption

- Business model
- Technology model
- Processes
- Requirements and solutions closely aligned
- Soft boundaries (process & services)
- Corporate Governance
- Outward business-driven view
- EA Governance
- Applications
- IT Governance
Enterprise Architecture for Business and Technology Integration Model

- Strategic aspirations
- Business plan
- Business initiatives
- Execution model

- Business processes
- Business relationships
- Business rules

- Domains of coherent functionality and information
- IT Architecture integrates IT to business
- KPI & Metrics

- Application programs and modules
- Information delivery portals
- Data model & query tools

- Hardware, storage, OS, network infrastructure
- Middleware, databases,
- Systems management
Enterprise IT Agility to Shorten Business Processing time AND Deliver Business Values

**Business Process Cycle Times have collapsed!**

- 30 minutes → 5 seconds: Trading analytics
- 20 minutes → 30 seconds: Airline operations
- 8 hours → 10 seconds: Call center inquiries
- 1 day → 5 minutes: Track financial position
- 1 day → 15 minutes: Supply chain updates
- Mail → 45 seconds: Document transfer
- 3 days → 1 hour: Phone activation
- 3 days → 1 hour: Refresh data warehouse
- 1 month → 1 day: Trade settlement
- 5 days → 1 day: Build-to-order PC

Time in seconds:

- $10^7$ seconds
- $10^6$ seconds
- $10^5$ seconds
- $10^4$ seconds
- 1,000 seconds
- 100 seconds
- 10 seconds
- 1 second
“Agility" is the ability of an organization to **sense** environmental change, and **respond** efficiently and effectively to that change.”

**Analyst Quote**
Enterprise Architecture Analogy on Travel Journey from KL to Penang by Car

- Typically can be reached around 5 hours

- **Without EA ~ No Preparation**
  - No Business Architecture ~ No Direction
  - No Data Architecture ~ No Car Information
  - No Application Architecture – No Engine Check
  - No Infrastructure Architecture – No Highway
  - Hence, arrived Penang in 5 months

- **With EA ~ Full Preparation**
  - Business Architecture ~ GPS Direction
  - Data Architecture ~ Car Information
  - Application Architecture – Engine Checked
  - Infrastructure Architecture – Travel by Highway
  - Hence, arrived Penang within 5 hours safely
Enterprise Architecture Development Method in a Nutshell based on TOGAF 9.1

- P: Establishing EA Governance
- P: Getting Management Buy-in
- P: Preparing Enterprise Transformation
- P: Defining EA Principles
- A: Implementing Enterprise Vision and Strategy
- B: Developing Business Architecture Gaps
- C: Developing Data Architecture Gaps
- C: Developing Application Architecture Gaps
- D: Developing Infrastructure Architecture Gaps
- E: Consolidating Gaps & Prioritizing projects
- F: Approving Projects & Finalizing Project Plan
- G: Implementing Projects & Executing Governance
- H: Managing Business & Technology Change
- H: Managing Business & Technology Change

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Integrated ATD GREAT Development Approach

B. Architecture Vision

C. Business Architecture

D. Information Architecture

E. Software Architecture

F. Technology Architecture

G. Realization

1) Define what you should measure
   Owner: CSI/Governance Manager/co-ordinator

2) Define what you can measure
   Owner: CSI/Governance Manager/co-ordinator

3) Gather the data
   Task 1 – 6: CSI/Governance Manager/co-ordinator
   With process owners of governed processes
   Task 7: Process owners of every process that is being governed in collaboration with CSI/Governance Manager

4) Process the Data
   Owner: CSI/Governance Manager/co-ordinator

5) Analyse the Data
   Owner: CSI/Governance Manager/co-ordinator

6) Present and use the information
   Owner: CSI/Governance Manager/co-ordinator

7) Implement Corrective Action
   Owner: CSI/Governance Manager/coordinator

Input | Steps | Output
A. Preliminary
   • Establish EA Team | A1. EPU EA Team

B1. EPU EA Scope defined

C1. Team equipped with business principles.

F1. Team equipped with skills development

G1. Skills development training in project prioritization and ATD REAL methodology that will enable prioritization of projects

With process owners of governed processes

Process owners of every process that is being governed in collaboration with CSI/Governance Manager

PMO

EA Development Processes

EA Governance

Parallel

ROADMAP
Enterprise Architecture Activities

Input

- Informs the required capability
- Ensures Realization of Business Vision
- Business needs feed into architecture
- Ensure Business Understanding
- Informs the Business of the current state

Architecture Capability Framework

- Sets targets, KPIs, budgets for architecture roles
- Drives need for Architecture Capability maturity
- Delivers new business solutions through Project Management Office (PMO)
- TOGAF ADM & Content Framework
- TOGAF Reference Models
- Operational changes cause updates
- TOGAF Enterprise Continuum & Tools

Architecture Development Method

- ADM Guidelines & Techniques
- Architecture Content Framework
- Enterprise Continuum & Tools

Output

Business Capabilities
FIVE Business Values in Measuring the IT Architecture Return Of Investment (ITA-ROI)

• Based on D. Rico’ 2006 (with ‘$’ or ‘#’ or ‘%’ ROI)

1. Financial Improvement
   • Making more Money
   • Saving Money
   • etc

2. Constituent Improvement
   • Growth in Customers and Partner ecosystem
   • Increase Stakeholder Values, etc

3. Reduced Complexity and Redundancy
   • Eliminating unnecessary systems
   • Focus on Quick Win result, etc

4. Economic Development
   • Focus on Market growth and new opportunities
   • Explore on new Initiatives
   • etc

5. Fostering Democracy
   • Promote Cultural Growth in Surrounding Community
   • Provide Free-Market democracy, etc
FIVE Action Steps to Achieve Successful Enterprise Transformation Program

1) **Integrate Business and IT together**
   - IT as part of the Business and IT is the Business
   - 50%-50% equal shares on every technology initiatives

2) **Establish Common Stakeholders Communication Platform** between Business and IT teams
   - Avoid GIGO ~ Garbage-in and Garbage-out
   - **Requirements** that cannot be described and documented then it cannot be implemented by IT
   - **Faster time to market** for new innovations and capabilities
FIVE Action Steps to Achieve Successful Enterprise Transformation Program Cont...

3) **Provide End-to-End Full traceability** from Business Requirement to Design to Implementation and Vice Versa
4) Embrace the IASA ITABoK (IT Architecture Body of Knowledge) skill sets to continue delivering Business Values of Technology

- Think Technology, but Write & Speak Business
- All IT projects must deliver business values/ROI
- All IT activities need to assign with the business Metrics
- Applying the art and science in designing and delivering valuable technology strategy for the business
5) Adopt and Adapt the **TOGAF Enterprise Architecture Framework** for successful journey of Office Transformation program

- **Critical to business survival and success** through IT Agility to evolve in dynamic business environment
- **To help PMO in delivering more successful IT projects**
- **Faster development and realization of business capabilities** for enterprise growth
- **Reduce and protect Risks** for future IT investment
Thank You, Q&A

“You can Architect Your Success”
Aaron Tan Dani @2009