Linking Strategy, Enterprise Architecture and Programme Management

Graham McLeod
Founding Partner
Inspired I.T. Consulting, Training & Research
Abstract

- Businesses are under pressure to be effective, efficient and agile
  - THE CHALLENGE: Achieving these simultaneously in organisations undergoing change, competing in aggressive markets and absorbing technological turbulence
- An architecture approach with an agile slant can help
  - Only constant is change
  - Cannot predict what the future holds
- What we can do is
  - Understand what we have, its strengths and limitations
  - Set in place principles and goals which guide decision making
- Taking a service oriented approach, we can identify
  - Constants, such as external stakeholders, product and services, industry requirements and generic internal services
- Models and tools can help us
  - Evaluate alternatives quickly and cost effectively
  - Communicate strategy succinctly to implementors
  - Serve as a basis for planning activity and monitoring progress

This presentation, based on 15 years experience across a variety of industries and organisations, provides a framework and examples to explain the approach.
Coverage

- The Challenge
- Scope of Enterprise Architectures
- Strategy
- Program Management
- Conceptual/Model Issues
  - Key Architecture Elements/Meta Model
  - Service Based Model
  - Scenarios & Filtering
  - Delta Models

- Initiative Aspects
  - Cost, Risk
  - Benefits
- Content/Solution Architecture Issues
  - Organizational APIs
  - Layered Models
  - Service Delivery
- Tool Requirements
- Conclusion
- Questions
The Challenge

- How to stay agile
- **But** still exploit infrastructure expenditure effectively and achieve efficiency
- **And** deal with things that typically take a long time
- Deliver real value from architecture efforts
Enterprise Architecture Coverage

- **Inventory**
  - What have we got?
  - How good is it?
  - Gaps & Redundancies
  - Opportunities

- **Blueprint**
  - What do we want?
  - Guide investment, initiatives, implementation choices
Two-way Street

Architecture choices must be informed by business drivers…

Technology possibilities can drive business change.
Strategy & Architecture

Relationship between Strategy, Architecture, Programme and Project Management
Delta Models

- Show net change between two scenarios/models
- Identify what an initiative must deliver to achieve the strategy
- Can address any dimension of the architecture:
  - Service
  - Process
  - System
  - Information
  - Technical Infrastructure…
- Provide accurate scope for projects
  - each change ~ work breakdown item
- Create communication between Strategists, Architects and Project Office
Scoping

mPAY System Context

Moderator

Vendor Request

MTN Decision

Vendor Request

Call Centre

Request Facility

Account/Facility Details

Product Manager

Statistical

Vendor Request

Request Vend Acc

Conf or Deny

Req. Paym

Conf or Deny

Conf or Deny

Conf or Deny

Conf or Deny

Conf or Deny

Confirmed Tx

Credit Check

Credit Pay System

Vendor Registration

Vendor Payment

Setup PIN

Encrpt. PIN

Subscriber Billing System

Subscriber

MTN Decision

Invoice

Request for facility

New

Existing unmodified

Existing modified

Bank

Funds Tfr

Invoice

Request for facility
Process
Adding Dimensions

Models can be enhanced with additional dimensions of:
- Methods (how we do things)
  - Deliverables, Process, Techniques, Resources
- Costs
- Quality & Metrics
- Timing
- Risk

The above can reflect both:
- Current Position
- Benchmarks from Industry/Competitors
- Goals
Excerpt from Inspired Enterprise Architecture Frameworks
Selecting Strategy

- How to get there from here with
  - Least possible
    - Risk
    - Disruption
    - Cost
    - Pain
    - Time
  - Best Possible
    - Strategic Fit
    - Compatibility
    - Flexibility
Portfolio Selection

- Determine per proposed project
  - Time, Resource, Cost estimate
  - Benefit Ranking
  - Risk Score
  - Dependencies

- Map into decision space
  - Choose based on budget boundary
  - Include highest ranked, adding in prerequisites
Important Issues

- External Focus
- Boundary of Organization
- Delivery of Expected “outputs”
- Required “inputs”
- Services, Processes & Support to Achieve
  - Distinguish “what” and “how”
- Manage logical and implementation distinction
  - Allow multiple alternatives for implementation
Services and “APIs”

- Context, layers and interfaces

- Stakeholder Interaction
  - Business Event
  - User Interface Event
  - Message/Call
  - API

Internal layers are not necessarily completely contained in an outer layer e.g. A computer system may serve multiple business systems or a module may be part of more than one computer system.

If we choose, we can see a business process as a business system.
Business “APIs”

- Published service interfaces
  - Like real APIs
    - Collected into Protocols
    - Documented
    - Held Stable, unless change negotiated with users
  - Implementation
    - Via Web Services (for example)
    - Possibly with Business Process Automation (e.g. workflow, BPEL)

- Facilitate
  - Rapid reconfiguration
  - Ease of outsourcing/partnering
Tool Support Requirements

- Flexible Meta Model
- Process Modeling
- Interoperability
- Scenarios, Filtering
- Collaboration Support
- Reporting, Document Composition
- Analysis and Derivation Capability
  - Inferencing
  - Computation
- Security and Audit Capability
Case Studies

- **Telecommunications**
  - Assistance with implementation of realtime evolving strategy

- **Media Group**
  - Integration of Strategy, Architectures, Project Office

- **International Bank**
  - Integration of Architectures and Business Transformation Initiatives
  - International operations to own business service layer/client facing and legislative compliance processes
  - Central operation to own integrated data and transactional services

- **Major Assurer**
  - Integration of Architectures and Initiatives, Budget Process
Conclusion

- **Benefits of integration across strategy, architecture and programme management**
  - Architecture choices reflect business goals
  - Business enlightened to explore technical possibilities
  - Initiatives better scoped, understood, evaluated, prioritised
  - Enhanced communication and implementation via projects

- **Benefits of a service based, layered EA approach**
  - Business more responsive to opportunities or imperatives
  - Time to market and respond reduced
  - Risks reduced

- **Mechanisms**
  - Capable meta models, architecture process integrated with strategy, initiatives, project management
  - Supportive tooling

- **Futures**
  - Bridges to automated implementation with MDA and BPEL
References

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THANK YOU

Questions?