Successful Enterprise Architecture

with ArchiMate® and TOGAF®

Ready for Action!

April 2013
Henry Franken - BiZZdesign
Henry Franken

• 46 years old, M.Sc. & Ph.D. (cum laude)
• Happy in life 😊
• Co-founder & manager of BiZZdesign
• Chair of the ArchiMate Forum at The Open Group
• At BiZZdesign: responsible for research and innovation. Alignment with and contribution to open standards are key
Who is BiZZdesign

• BiZZdesign offers: native tooling, consultancy and certified training courses for TOGAF and ArchiMate.

• BiZZdesign offers complete and integrated solutions (tools, methods, consultancy and training) to design and improve organizations.
  – Business Model Innovation, Strategy Alignment, Enterprise Architecture, Business Requirements Management, Business Process Analysis and Lean Management are important ingredients in the solutions.

• Recognized as leader in magic quadrant by Gartner and other analysts.

• Contributed to and edited the ArchiMate 2.0 specification.
• Involved in the work group working towards the next version of TOGAF® and its alignment with ArchiMate®.
Elevator pitch of today: TOGAF & ArchiMate ready for action!

Perfect basis for a tool supported Enterprise Architecture practice!

- Specifically designed for enterprise architecture
- Method to guide you to set up and perform EA successfully
- Integrated, consistent and coherent modelling in various phases
- Supports generation of compelling views for various stakeholders from a central repository
- Eases impact, gap and other types of analysis
- Eases sharing, maintenance and reuse of models
How about (Enterprise) Architecture

What does it mean and why do we need it?
How about Enterprise Architecture!

[Lankhorst et al., 2005 - Fig. 1.4. Enterprise architecture as a management instrument]
Why Enterprise Architecture?

- Managing change and complexity:
  - Aligning strategy, business and IT
  - Impact analysis
  - Project support (project start architectures)
  - Portfolio management
  - Communication with stakeholders
  - ...
- Obtaining insight in baseline situation ("as is")
- High-level design of the target situation ("to be")
- Enterprise architecture as a tool for:
  - Communication
  - Governance
  - Innovation
What is Enterprise Architecture?

- A **discipline**, with the objective of **steering changes**
- A **product**
  - A design that shows the coherence between products, processes, organisation, information supply and infrastructure, based on a vision and certain explicit starting points, principles and preferences
- A **process**
  - Way of working
  - Aimed at the development and use of enterprise architectures within an enterprise
  - With people and resources
Ingredients of a Successful EA Practice

TOGAF

ArchiMate

Process

View-points

Language

Repository, Reference Models

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A short introduction on TOGAF

A framework and way of working for Enterprise Architecture
What is TOGAF?

• A framework for enterprise architecture
• Version 9.1 was released January 2012 in San Francisco
• Facilitates and provides:
  – A way of working (method)
  – A reference structure to build models (content framework)
  – A quick start (some high level reference models)
  – Guidelines & techniques and reusable templates

Best known ADM: Architecture Development Method
Architecture Development Method (ADM)

1. “Getting the organization committed & involved”

2. “Getting the architecture right”

3. “Making the architecture work”

4. “Keeping the process running”

as-is & to-be gap analysis
Some more information about ArchiMate

A modelling language for Enterprise Architecture
Why one language...
What is ArchiMate?

• Visual modelling language for enterprise architecture
• Version 2 was released January 2012 in San Francisco
• Facilitates shared understanding across disciplines
  – Management
  – Enterprise, technical and business architects
  – Consultants, engineers, analysts, various business people

• Complements and interrelates to detailed system design languages such as UML, SysML, BPMN, ERD, SBVR, BMM
Worldwide interest growing rapidly
The ArchiMate Language

A basis for

High-level modelling within domains

Modelling relationships between domains

Relating detailed design models

Visualizations

Analysis

ArchiMate language

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Layered View Example

Damage notification → Accept and register claim → Assess claim → Pay claim

Acceptance service → Assessment service → Customer administration service

Payment system → Acceptance system → Assessment system

Messaging service → Claim files service → Customer file service

Message queueing → DBMS → CICS

Mainframe
<table>
<thead>
<tr>
<th>Active Structure</th>
<th>Behavior</th>
<th>Passive Structure</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business layer</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Application layer</strong></td>
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<td><strong>Technology layer</strong></td>
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<tr>
<td><strong>Implementation &amp; Migration</strong></td>
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</table>
A Real Language

- Boxes become concepts
- Lines become relationships
- A modelling language defines concepts, relationships, semantics, rules and notation
TOGAF ADM and the ArchiMate Framework

Phase A: Vision
Phase B: Business Architecture
Phase C: Information Systems Architecture
Phase D: Technology Architecture
Phase E: Opportunities & Solutions
Phase F: Migration Planning
Phase G: Implementation Governance
Phase H: Architecture Change Management

Active Structure, Behaviour, Passive Structure, Motivation

Business layer
Application layer
Technology layer
Implementation & Migration
ArchiMate Core

• Models the business, application and technology layers and their interrelations.

• Complete coverage of information, product, process, application, technological architectures

• Thus addresses needs of the TOGAF phases to build the as-is and to-be architecture
Layered View Example

Business

- Damage notification
  - Accept and register claim
    - Declaration service
  - Assess claim
    - Payment service

Application

- Acceptance service
- Assessment service
- Customer administration service

Technology

- Payment system
- Acceptance system
- Assessment system
- Customer administration system

- Messaging service
- Claim files service
- Customer files service

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Example: Business Layer Model
Example: Application Layer Model
Example: Technology Layer Model
Relationships
ArchiMate Motivation Extension

• Models stakeholders, drivers for change, business goals, principles and requirements, and their relationships

• Supports traceability between motivations and other architectural components

• Thus addresses needs of the early TOGAF phases and the Requirements Management process

• Inspired by standards and existing techniques such as OMG’s Business Motivation Model, KAOS, i*
Traceability of Motivations
Implementation & Migration Extension

• Models and supports:
  – Management of individual projects and project portfolios
  – Gap analysis
  – Transition and migration planning

• Thus addresses the needs of the later phases of the TOGAF ADM cycle
Example: Implementation & Migration Extension
Example: Implementation & Migration Extension

Gap: Baseline-Transition

Baseline Architecture → Transition Architecture → Target Architecture

Gap: Transition-Target

Baseline Architecture

Project A: Integration of CRM systems

Transition Architecture A

Project B: Integration of back-office systems

Target Architecture

Project Back-office system integration

Work Package Software modification

Work Package Hardware

Work Package Legacy outphasing

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Benefits of ArchiMate Experienced in Practice

- ArchiMate closes the gap between ‘free-format’ strategy models and detailed solutions architecture models
- Consistent and integrated modeling:
  - It is a tool for knowledge management
  - It helps to integrate various (types of) models
  - It enables stakeholder-specific view generation
  - It enables analysis (gap, what-if, comparison etc).
- Insight in the various domains, but also their interrelationships
- It is a widely accepted open standard, i.e., no vendor lock-in
- ArchiMate makes it easier to communicate with architects across organizational boundaries, domain boundaries and between architect and designer
- Easy to use, low complexity, step-by-step increase in advanced use
Tool Support for EA: Key Features

- Unambiguous and precise documentation of EA artifacts
- Documentation of properties of model elements
- Safeguard the consistent use of common language and notation
- Maintain the consistency and coherence of complex models
- Easy switching between formal and non-formal visualizations
- Framework and methodological support
- Traceability between layers
- Reporting
- Support for analysis (e.g., gaps, impact-of-change, performance, costs)
Tool Support for EA: Advanced Features

- Metamodel configuration
- Creating and maintaining inter-model relationships
- Multi-user collaboration support
- Security features (access control, corporate security policies)
- Drill-down support (e.g., conceptual, logical, physical)
The proof of the pudding...
Conclusion of today:
TOGAF & ArchiMate ready for action!

Perfect basis for a tool supported Enterprise Architecture practice!

- Specifically designed for enterprise architecture
- Method to guide you to set up and perform EA successfully
- Integrated, consistent and coherent modelling in various phases
- Supports generation of compelling views for various stakeholders from a central repository
- Eases impact, gap and other types of analysis
- Eases sharing, maintenance and reuse of models
Do you want to know more?

You can get a brochure at the BiZZdesign booth:

Come and have a look at our new book:
Delivering successful Enterprise Architecture with TOGAF & ArchiMate!

www.BiZZdesign.com: whitepapers, brochures and tool demo, etc.
Or you can contact me directly at: H.Franken@BiZZdesign.com
Thank you for your attention!

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