A pragmatic approach to architecture

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Contents

Agenda
• Principles for pragmatic architecture
• Essential viewpoints for an enterprise architecture

Key messages
• Architecture should be pragmatic and goal-oriented
• Best-practices exist that show how architecture can be pragmatic
• TOGAF is a framework that allows a pragmatic approach
ArchiXL

- IT-architecture consulting firm, founded in 2008
- Based in Amersfoort, the Netherlands
- Focus on financial and public sector

Knowledge areas:
- IT architecture (BPM, EAI/SOA, ECM, IDM, BI, Portals)
- Enterprise architecture methods and techniques (TOGAF, ArchiMate)
- Sector knowledge (insurance, municipalities, education)
Principles for pragmatic architecture

- Use of open standards
- Reusing best-practices
- Iterative approach
- Concrete and usable results
- Close interaction with stakeholders
- “just-enough” architecture
- Focus on knowledge, not on rule enforcement
Use of open standards

**Key message:** standards are a good starting point, but use them wisely

**Tip:** use formalised models for architects and engineers, use simple PowerPoint models for management and users

TOGAF

ArchiMate
Reusing best practices

Key message: reuse reference architectures in the market, and make your own

Tip: separate your architecture into an organisation-specific and a generic part; the latter can be stored in the reference library.
Iterative approach

Tip: make a plan for defining your architecture with clear milestones and a deadline

Key message: deliver fast, deliver often and make sure every delivery provides added value
Concrete and usable results

Key message: be clear on what you deliver, and focus on the goals and requirements

Tip: show your sponsor examples of previous architecture deliverables to let him understand what he will get

Outputs

The outputs of Phase B are:

- Refined and updated versions of the Architecture Vision phase deliverables, where applicable,
  - Statement of Architecture Work, updated if necessary
  - Validated Business Principles, Business Goals, and Business Drivers, updated if necessary
  - Architecture Principles
- Draft Architecture Definition Document, including:
  - Baseline Business Architecture, Version 1.0 (detailed), if appropriate
  - Target Business Architecture, Version 1.0 (detailed), including:
    - Organization structure - identifying business locations and relating them to organizational unit
    - Business goals and objectives - for the enterprise and each organizational unit
    - Business functions - a detailed, recursive step involving successive decomposition of major functional areas into sub-functions
    - Business services - the services that the enterprise and each enterprise unit provides to its customers, both internally and externally
    - Business processes, including measures and deliverables
    - Business roles, including development and modification of skills requirements
    - Business data model
    - Correlation of organization and functions - relate business functions to organizational units in the form of a matrix report
  - Views corresponding to the selected viewpoints addressing key stakeholder concerns
- Draft Architecture Requirements Specification, including such Business Architecture requirements as:
  - Gap analysis results
  - Technical requirements - identifying, categorizing, and prioritizing the implications for work in the remaining architecture domains; for example, by a dependency/priority matrix (for example, guiding trade-off between speed of transaction processing and security); list the specific models that are expected to be produced (for example, expressed as primitives of the Zachman Framework)
  - Updated business requirements
  - Business Architecture components of an Architecture Roadmap
Close interaction with stakeholders

**Key message:** talk to all key stakeholders, bring them together in workshops to get consensus.

- **Tip:** reserve time with the people that have the knowledge; they can provide you with the information you really need.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Involvement</th>
<th>Class</th>
<th>Relevant Viewpoints</th>
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</thead>
<tbody>
<tr>
<td>CxO (Corporate Functions); e.g., CEO, CFO, CIO, COO</td>
<td>This stakeholder group is interested in the high-level drivers, goals, and objectives of the organization, and how these are translated into an effective process and IT architecture to advance the business.</td>
<td>KEEP SATISFIED</td>
<td>Business Footprint, Goal/Objective/Service Model, Organization Chart</td>
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<tr>
<td>Procurement (Corporate Functions); e.g., Acquirers</td>
<td>This stakeholder group is interested in prioritizing, funding, and aligning change activity. An understanding of project content and technical dependencies between projects adds a further dimension of richness to portfolio management decision-making.</td>
<td>KEEP SATISFIED</td>
<td>Roadmaps, Business Footprint, Application Communication, Functional Decomposition</td>
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<td>Major concerns for these stakeholders are understanding what building blocks of the architecture can be bought, and what constraints (or rules) exist that are relevant to the purchase. The acquirer will shop with standards. The key concern is to make purchasing decisions that fit the architecture, and thereby to reduce the risk of</td>
<td>KEY PLAYERS</td>
<td>Cost View, Standards View</td>
</tr>
</tbody>
</table>

Tip: don’t forget to have your architecture reviewed by other architects.

Tip: reserve time with the people that have the knowledge; they can provide you with the information you really need.
Key message: do not overdeliver; focus on the 20% artefacts that deliver 80% of the value

“just-enough” architecture

Tip: first deliver a high-level architecture with only the goals, guiding architecture principles, high-level diagrams, and major changes.

Tip: deliver more detailed architectures for specific themes that require business attention.
Focus on knowledge, not on rule enforcement

Tip: look at the intent of principles and guidelines and not so much at their formulation

Tip: deviating from principles and guidelines can be justified if there is a really good motivation

Key message: architects provide value through skills and knowledge, but they don’t know everything
Where is the essence?
Functional decomposition diagram (business functions)

Controlling business functions:
- Strategic Control
- Enterprise Architecture
- Quality Management
- Internal Reporting
- External Reporting

Primary business functions:
- Product Development
- Marketing
- Sales
- Policy Administration
- Claims Handling
- Financial Handling
- Maintain Customer Relations
- Maintain Intermediary Relations
- Maintain Provider Relations

Secondary business functions:
- IT Development & Management
- Human Resource Management
- Financial Management
- Facility Management
- Communications
- Legal
- Procurement
- Business Improvement
- Policy Administration
- Claims Handling
Impact of drivers/goals/objectives on business functions

1. Introduce new products for that group
2. Change marketing approach
3. Change sales process for new customer group and new products
4. Change policy administration for new products

Tip: determine impact of drivers/goals/objectives on high-level business, application and technology views
Value chain diagram (roles and information flows)

- **Insurer**
  - Request for information, policy acceptance, policy changes
  - Product information, policy, invoice
  - Request for indemnification
  - Indemnification approval or rejection
  - Request for legal report
  - Legal report
  - Request information, report fraud
  - Fraud information
  - Indemnation payments, premium collections
  - Account statements
  - Regulatory report

- **Customer/Intermediary**
  - Request for information, policy acceptance, policy changes
  - Product information, policy, invoice
  - Claim rejection, claim acceptance
  - Claim
  - Damage assessment order
  - Damage report
  - Repair order
  - Invoice
  - Car information request
  - Car information
  - Request for indemnification
  - Indemnification approval or rejection
  - Request for legal report
  - Legal report
  - Request information, report fraud
  - Fraud information
  - Indemnation payments, premium collections
  - Account statements
  - Regulatory report

- **Damage Expert**
  - Damage assessment order
  - Damage report
  - Car information request

- **Damage Repair**
  - Repair order
  - Invoice

- **Car Registration Center**
  - Car information request
  - Car information

- **Indemnification Foundation**
  - Request for indemnification
  - Indemnification approval or rejection
  - Request for legal report
  - Legal report
  - Request information, report fraud
  - Fraud information
  - Indemnation payments, premium collections
  - Account statements
  - Regulatory report

- **Bank**
  - Car information request
  - Car information

- **Central Bank**
  - Car information request
  - Car information
Application portfolio catalog (application components)
Issues in application portfolio

1. Security in customer portal is not in line with security policy
2. Prolonging of policies does not fit into batch window
3. Integrated customer view does not include life information
4. Maintenance costs of personnel administration are too high

Tip: plot issues on high-level business, application and technology views
Tip: draw application communication diagrams for specific change areas
<table>
<thead>
<tr>
<th>Technology standards catalog (system software)</th>
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<tbody>
<tr>
<td><strong>Office Productivity</strong></td>
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<td>Microsoft Office</td>
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<td>Adobe Reader</td>
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<td><strong>User Interface</strong></td>
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<td>Microsoft Office Sharepoint Server</td>
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<td>Microsoft Search Server</td>
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<td>Oracle Portal</td>
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Questions

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