

Making the Business Case in TOGAF™ 9

A White Paper by:

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October 2009

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Document No.: W099

Published by The Open Group, October 2009

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Executive Summary

This White Paper details the changes required to TOGAF™ 9 in order to ensure that the business case, value proposition, and key performance indicators of the Target Architecture defined during the Architecture Vision phase (Phase A) are consistently reviewed and refined across the various phases of the Architecture Development Method (ADM).

This document will be of interest to Enterprise Architects and TOGAF practitioners who are constantly challenged to ensure that there is a business case for the various IT initiatives they are involved with every day.

First, it details the rationale for making these changes. Next, it examines the current state of the guidance provided for the domain architectures using Phase B of the ADM as an example. Finally, it highlights the specific changes required to this phase so that they can also be applied to Phases C and D.

As architects get more and more involved with the technical details of the architecture while employing the ADM, it is extremely important that they do not lose sight of the business case for the complete solution, regardless of the TOGAF ADM phase they are in or the specific architectural domain being detailed.

Recommendation

The individual phases for each of the domain architectures – Phase B: Business Architecture, Phase C: Information Systems Architecture, and Phase D: Technology Architecture – must call out the revisions required to the business case, value proposition, and key performance indicators for the Target Architecture specified. The development of the business case, value proposition, and key performance indicators called out in the Architecture Vision (Phase A) must be refined to ensure that they continue to hold true within each domain architecture – Business, Application, Data, and Technology.

Rationale

When the business case is made in Phase A: Architecture Vision, it is done at a high level that should apply – in theory – to the architectures outlined in the subsequent phases. However, the business case developed during the Phase A may be rendered inaccurate and invalid as details are uncovered during the definition of the Business Architecture, Information Systems Architecture, and Technology Architecture.

The refinement of the business case and the value propositions should continue to corroborate the original definition of the business case in Phase A. The level at which this is done in Phase A does not allow for a more detailed analysis that can be more effectively performed in the subsequent architectural phases in their respective context. The devil – so to speak - may very well be in the details. Issues may surface when the business case is outlined within the individual phases of Business, Application, Data, and Technology that may not have surfaced in Phase A.

Without the validation of the business cases in subsequent phases, there is an increased risk of the Target Business, Application, Data, and Technology Architectures not being in alignment with the overall business goals, resulting in a greater chance of mis-alignment between business and IT.

The business case and value proposition may change over time because of various factors that are not within the control of the Enterprise Architect. The changes proposed in this White Paper to TOGAF 9 provide multiple opportunities for these variations to be taken into account. Absent these changes, and reality within the individual architectural phases may be significantly different from the business case originally projected within the Architecture Vision phase.

Current State in TOGAF 9

This section details the current state of the guidance provided in TOGAF 9 around the definition and refinement of the business case for the Target Architecture. Phase A requires the development of the business case for the architectures and changes required, along with the production of the value proposition for each stakeholder grouping. The outputs are incorporated within the Statement of Architecture Work that is produced at the end of this phase. Subsequent phases do not call out the step to detail the business case developed in the context of the architecture being defined (Business, Application, Data, or Technology). Even though there is a reference to the Statement of Architecture Work during the Formal Stakeholder Review and the ADM Architecture Requirements Management phase, the review of the business case and value proposition is not called out specifically.

This is detailed in the sections below using Phase B: Business Architecture as a representative example.

Phase A: Architecture Vision

TOGAF 9 Part II, Section 7.4.9 (Define the Target Architecture Value Propositions and KPIs) calls out the following:

- Develop the business case for the architectures and changes required
- Produce the value proposition for each of the stakeholder groupings
- Assess and define the procurement requirements
- Review and agree the value propositions with the sponsors and stakeholders concerned
- Define the performance metrics and measures to be built into the enterprise architecture to meet the business needs
- Assess the business risk (see TOGAF 9 Part III, Chapter 31 (Risk Management))

The outputs from this activity should be incorporated within the Statement of Architecture Work to allow performance to be tracked accordingly.

Phase B: Business Architecture

The Statement of Architecture Work is identified as one of the inputs to this phase.

The steps to be executed in this phase include:

- Selection of reference models, viewpoints, and tools
- Development of Baseline and Target Business Architecture followed by gap analysis
- Define the roadmap components
- Resolve impacts across the Architecture Landscape
- Conduct formal stakeholder review
- Finalize the Business Architecture
- Create Architecture Definition Document

There is no reference to the business case, value proposition, or the key performance indicators during the definition of the Target Business Architecture or its subsequent review and finalization.

This is the case with Phase C: Information Systems Architecture (Data and Application) as well as Phase D: Technology Architectures.

Description of Changes to TOGAF 9

The business case developed during Phase A: Architecture Vision needs to be revisited and detailed as it pertains to Phase B: Business Architecture, Phase C: Information Systems Architecture (Data), Information Systems Architecture (Application), and Phase D: Technology Architecture during the definition of the corresponding Target Architecture. It should also be called out during the formal stakeholder review as well as the finalization of the given architecture.

In each of the phases that detail the individual architectures, a new section must be added that calls out the step to detail the business case developed in the context of the given architecture. The review of this content produced during the formal stakeholder review needs to be called out in the Statement of Architecture Work generated as an output from this phase.

The manner in which this change can be manifested is detailed for Phase B: Business Architecture below using *underlined italicized font*. The same changes can be carried forward and implemented within the corresponding sections of Phases C and D.

8.4.2 Develop Baseline Business Architecture Description

Develop a Baseline Description of the existing Business Architecture, to the extent necessary to support the Target Business Architecture. The scope and level of detail to be defined will depend on the extent to which existing business elements are likely to be carried over into the Target Business Architecture, and on whether architecture descriptions exist, as described in Section 8.2. To the extent possible, identify the relevant Business Architecture building blocks, drawing on the Architecture Repository (see Part V, Chapter 41). Where new architecture models need to be developed to satisfy stakeholder concerns, use the models identified within Step 1 as a guideline for creating new architecture content to describe the Baseline Architecture.

8.4.3 Develop Target Business Architecture Description

Develop a Target Description for the Business Architecture, to the extent necessary to support the Architecture Vision. The scope and level of detail to be defined will depend on the relevance of the business elements to attaining the Target Architecture Vision, and on whether architectural descriptions exist. To the extent possible, identify the relevant Business Architecture building blocks, drawing on the Architecture Repository (see Part V, Chapter 41). Where new architecture models need to be developed to satisfy stakeholder concerns, use the models identified within Step 1 as a guideline for creating new architecture content to describe the Target Architecture.

New Section: Detail the Target Business Architecture Value Proposition and KPIs

- Validate the business case developed in Phase A: Architecture Vision in the context of the Target Business Architecture
- Detail the business case developed in Phase A: Architecture Vision for the Target Business Architecture
- Refine the value proposition for this Target Business Architecture for each of the stakeholder groupings
- Detail the performance metrics and measures to be built into the Business Architecture to meet the business needs

8.4.4 Perform Gap Analysis

First, verify the architecture models for internal consistency and accuracy:

- Perform trade-off analysis to resolve conflicts (if any) among the different views
- Validate that the models support the principles, objectives, and constraints
- Note changes to the viewpoint represented in the selected models from the Architecture Repository, and document

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- Test architecture models for completeness against requirements
- Identify gaps between the baseline and target:
 - Create gap matrix, as described in Part III, Chapter 27
 - Identify building blocks to be carried over, classifying as either changed or unchanged
 - Identify eliminated building blocks
 - Identify new building blocks
 - Identify gaps and classify as those that should be developed and those that should be procured

8.4.5 Define Roadmap Components

Following creation of a Baseline Architecture, Target Architecture, and gap analysis results, a Business Roadmap is required to prioritize activities over the coming phases based upon the extent to which the value propositions outlined in the Architecture Statement of Work are realized.

This initial Business Architecture Roadmap will be used as raw material to support more detailed definition of a consolidated, cross-discipline roadmap within Phase E: Opportunities & Solutions.

8.4.6 Resolve Impacts Across the Architecture Landscape

Once the Business Architecture is finalized, it is necessary to understand any wider impacts or implications.

At this stage, other architecture artifacts in the Architecture Landscape should be examined to identify:

- Does this Business Architecture create an impact on any pre-existing architectures?
- Have recent changes been made that impact on the Business Architecture?
- Are there any opportunities to leverage work from this Business Architecture in other areas of the organization?
- Does this Business Architecture impact other projects (including those planned as well as those currently in progress)?
- Will this Business Architecture be impacted by other projects (including those planned as well as those currently in progress)?

8.4.7 Conduct Formal Stakeholder Review

Check the original motivation for the architecture project and the Statement of Architecture Work against the proposed Business Architecture, asking if it is fit for the purpose of supporting subsequent work in the other architecture domains. *Review and validate the business case and value proposition detailed for the Target Business Architecture.* Refine the proposed Business Architecture only if necessary.

8.4.8 Finalize the Business Architecture

- Select standards for each of the building blocks, re-using as much as possible from the reference models selected from the Architecture Repository
- Fully document each building block

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- Conduct final cross-check of overall architecture against business goals; document rationale for building block decisions in the architecture document
- Document final requirements traceability report
- Document final mapping of the architecture within the Architecture Repository; from the selected building blocks, identify those that might be re-used (working practices, roles, business relationships, job descriptions, etc.), and publish via the Architecture Repository
- Finalize all the work products, such as gap analysis results

Create Architecture Definition Document

- Document rationale for building block decisions in the Architecture Definition Document
- Prepare the business sections of the Architecture Definition Document, comprising some or all of:
 - A business footprint (a high-level description of the people and locations involved with key business functions)
 - A detailed description of business functions and their information needs
 - A management footprint (showing span of control and accountability)
 - Standards, rules, and guidelines showing working practices, legislation, financial measures, etc.
 - A skills matrix and set of job descriptions

If appropriate, use reports and/or graphics generated by modeling tools to demonstrate key views of the architecture. Route the document for review by relevant stakeholders, and incorporate feedback.

Outputs

The outputs of Phase B are:

- Refined and updated versions of the Phase A: Architecture Vision deliverables, where applicable, including:
 - Statement of Architecture Work (see Part IV, Section 36.2.20), *updated with the detailed business case and value proposition for the Target Business Architecture*
 - Validated business principles, business goals, and business drivers (see Part IV, Section 36.2.9), updated if necessary
 - Architecture principles (see Part IV, Section 36.2.4)
- Draft Architecture Definition Document (see Part IV, Section 36.2.3), 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 units
 - Business goals and objectives — for the enterprise and each organizational unit

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- 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 (see Part IV, Section 36.2.6), 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 (see Part IV, Section 36.2.7)

About the Author



EDS Distinguished SE, E.G. Nadhan has more than 25 years of experience in the IT industry delivering integrated solutions in distributed environments. Nadhan is currently the Lead Technologist for Global Strategic Capability Management within Applications Services. In this role, he provides thought leadership and technical oversight to the teams building strategic capabilities across the globe that enable the delivery of enterprise-level solutions to HP customers across industries. As an Open Group Master Certified IT Architect, Nadhan represents HP in The Open Group Architecture Forums and has contributed content to TOGAF 9 in addition to implementing changes to TOGAF 8.1.1. Nadhan is also the co-chair of the Service Oriented Infrastructure Working Group and represents HP in the Enterprise Architecture Definition Project. Nadhan contributed the Service Oriented Infrastructure chapter of the SOA Source Book. He is also a member of the Doctor of Management & Information Technology Advisory Board at Lawrence Technological University in the US.

About the HP TOGAF Community

This White Paper is submitted to The Open Group by the HP TOGAF Community, whose mission is to influence and advance the enterprise architecture industry through TOGAF. Members of the HP TOGAF Community conceived, prepared, and reviewed the White Paper. Members of the Community are: Charlie Bess, Michael Coatsworth, Cindy S. De La Cruz, Jagannadham Dulipala, Steven Engel, Linda A. Fernandez, Steve Hauk, Birosh Thomas Heldad, Harry Hendrickx, Dong Huang, John Kananghinis, Jagdish S. Karira, Sai R. Lagisetty, Anil Lakhan, Walt Lammert, Jean B. Lehmann, Stephanie P. Morin, E.G. Nadhan, Urban Nilsson, Robin R. Petrowski, Ruud Pieterse, Vinayak Ragho, Saverio Rinaldi, Roberto Rivera, Matthew Rouse, Nayan B. Ruparelia, Larry Schmidt, Adrian von Aesch, Jun-Hua Wang, Steven Wild, and Lei Yang.

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