Business Architecture – Dragon1 Step by Step Guide

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How to set up, build, use and maintain a Business Architecture on the Dragon1 platform

What is Business Architecture?

Business Architecture is part of Enterprise Architecture. Business Architecture is a coherent set of Business-related concepts, principles, design guidelines and frameworks/standards, derived from the strategy and business model of an organization. As certain types of culture, values and identity are prominent concepts themselves and they also introduce other concepts in the organization, culture, values and identity play an important role in the business architecture. Business as a term is the way an organization brings forth products and services with a purpose via a range of coherent activities.

Business Architecture is a design discipline, to document, visualize and analyze gaps, weaknesses, and strengths in the current state of the business and to design a strong future state of the business. A concept is an abstraction of an implementation, an approach and an idea. A principle describes the way a concept works, producing results. Almost everything can be seen as a concept, but only a few concepts are relevant for an organization to be made part of an architecture. This is the challenge for the architect: find out what concepts and their principles should be made part of the business architecture.

Business Architecture is different from the business structure. Business structure is how everything, like values, mission, goals, priorities, capabilities, products, processes, departments, services, contracts, customers, data and applications, is connected and interdependent and related to each other, but without the conceptual context. It is the conceptual context with concepts, principles, design guidelines and frameworks/standards that makes it a business architecture.

The purpose of business Architecture is to have the business structure of the organization be strategically transformed into a direction or state that much better supports the execution of the business strategy, than currently. The business architecture principles, visualizations and views will help the relevant stakeholders to do gap analyses, impact-of-change-analyses, what-if scenarios and risk assessments much more efficiently. As a positive side effect data with business architecture data will be managed as an asset much better.

Business Architecture can also be seen as a design capability of the organization. For this, business architects are needed. They are qualified people that are able to design architecture. That means they know how to select the relevant business-related concepts, principles, guidelines and frameworks/standards for the organization, to do structure analysis, gap analysis, what-if scenarios, planning, etc. It is best to have an EA Team where business architects are part of.

Business Architecture can be described in a Business Architecture Dossier consisting of documents and visualizations with views. Often a Business Architecture Design Book is created consisting of 15 top-level visualizations (or diagrams) to easily communicate the Business Architecture, showing the current state and future state and a transformation scenario.

The architecture diagrams will provide insights and an overview of the strengths and weaknesses of the business architecture and they will show solutions.

It is best to document Business Architecture, Data Architecture, Application Architecture, Security Architecture, IT Architecture, and Solution Architectures as separate topics in an Enterprise Architecture document or dossier.

Design

To analyze the current state of business architecture or to design a future state business architecture, a business strategy, data strategy and IT strategy are most useful as inputs, else workshops with stakeholders need to be held.

To analyze or design a business architecture, mission, vision, values, culture, legislation, organization structure, goals, objectives, priorities, job roles, projects and some capabilities are needed as input.

With all these inputs, business architects will be able to identify or create a total concept for the organization, consisting of often 10 key required/mandatory concepts, to fulfill its purpose. Each of these concepts has various principles in them. Making these principles explicit in documents and visualizations helps to direct and guide the evolution of the business structure of the organization.

It is common to visualize the total concept and key concepts in design sketches and artist impressions, also using metaphors, to get the essence of the concepts and principles across the table.

The design should be done by qualified architects. They are able to analyze, weigh, select and propose domains, functions, capabilities, concepts, principles, design guidelines and frameworks/standards to management.

Note that it is important to be able to distinguish between capabilities, concepts, principles and guidelines to have a strong business architecture. Capabilities can be seen as implemented concepts. Whereas principles can be seen as the explanation of how concepts work and produce results.

Today business architectures are often built around business capabilities. Business capabilities are assemblies of qualified people, processes and technology/tools. A business capability is what an organization should be excellent at, because of its mission, vision and business model. Selecting the right business capabilities and measuring how well they are currently implemented is an important task.

It is a best practice to at least distinguish between core business capabilities and supporting capabilities (this helps us to do the make or buy decisions).

Often the design of business architecture takes place in iterations and often takes 1 to 3 months. Collecting and updating the data to use for the design, will be a continuous, never-ending, process. Therefore, the collection of the data should be automated as much as possible.

Many organizations first choose only to document reactively the current state business structure and label / communicate that as business architecture. But then you will not cash in the strategic benefits of business architecture. It is always realistic and doable to plan to actually document, design and use the current state and future state business architecture of the organization. As a best practice use a roadmap to design, use and maintain your business architecture.

As all mission and business-critical should be managed as assets, the data used to design business architecture is likely to be managed in all kinds of source systems.

A best practice to speed up designing a business architecture is to make use of industry standards and reference models. A best practice is also to document all the design decisions made by you or the stakeholders and owner/client.

On the Dragon1 website, there are various reference models for capabilities, concepts and principles to get started with Business Architecture.

Set Up

To set up a Business Architecture Dossier it is best to use a repository-based EA Tool like Dragon1. In the EA tool, you document/administer the concepts, principles, design guidelines and frameworks/standards of the architecture, and entities like capabilities, services, processes, data objects and applications and their relationships (this is the structure of the organization). Also, you create and design visualizations, viewpoints, views and scenarios in the EA Tool.

Create at least 3 atlases (f.i. Architecture, Design, Projects) and 15 templated visualizations for the current state of Business Architecture. For every diagram named below, there are templates available on Dragon1.

At any point in time you can generate a pdf Business Architecture document using the Dragon1 MS Word template and PowerPoint template for a business architecture document.

Create at least 3 stakeholder-based views (visual overlays) with every visualization. To be able to do this, create a list of key stakeholders (about 20) and find out their needs and requirements via interviews and workshops. Per stakeholder, recognize role-based viewpoints. Often viewpoints address issues and concerns on a role-based topic for a stakeholder. Per viewpoint, identify 1 or more views to visualize the issues and concerns of the stakeholder. Tip: create a model of all this.

A scenario is a series of events, choices/decisions and changes. The strategy documents of an organization often contain information to identify transformation or change scenarios for the Business Architecture, like centralizing or decentralizing or moving towards a new more digital and data-driven business model.

Be sure to document at least three different scenarios for transformation in your Business Architecture. Like: small change/impact, medium change/impact, large change/impact.

The following top-level visualizations are very common to create for a Business Architecture (for the current, intermediate and future state).

Business Metamodel (showing how all the parts of the business architecture & business structure are related to each other)	Business Capabilities Map / Business Concepts Map (High level or detailed)	Business landscape (showing the relationship between organizations, services, customers, products, processes, data, application, etc.)
Business Strategy Framework diagram	Business Management Dashboard	Application Landscape & Data Landscape
Business Architecture Framework diagram	Layered Enterprise Map (with customers, products, services, organizations, processes, data and applications)	Process/Application Landscape
Enterprise Architecture Blueprint or Business Architecture Blueprint	Business Services map (linked to the Business Service catalog)	10 detailed diagrams explaining the principles of the key 10 concepts
Business Transformation Roadmap (High-level or Basic)	5 blueprints / detailed diagrams of the Business services for 5 key products.	Key Business Solutions/Projects Landscape (solutions/projects plotted onto the Business Landscape
Business Standards Map	Business Governance Model and Reporting Map	Business Solution Design Guidelines Map
Business Architecture Artist Impression or Design Sketch of the total concept	Business Domains Map	Business Functions and Business Systems Map

and 10 concepts highlighted (for communicative purposes)		

Note that if a visualization or view becomes too complex, it is a best practice to divide it up into domains.

Build

When you have created the template versions of the atlases, visualizations, views and scenarios, you can start to build or create the actual visualization, views and scenarios. It is a best practice to plan when and how you will create/build the visualizations, views and scenarios.

To build a visualization, view or scenario you need data from source documents. So, you need to plan ahead of when you will receive data.

Always create or draw a sketch of the metamodel and the model of the visualization you are creating.

Test and see what color schema, type of icons and style work best with your stakeholders.

Always add a name, title, subtitle, and communication message to your visualization. It helps to make your visualization understandable.

Be sure to inspire stakeholders with reference models or example visualizations of what you are going to create. Sometimes the data that you need is not yet available or updated. And this helps the stakeholders to provide you with the data needed.

Define three or four cycles or iterations to create your visualizations in. If possible try to have your visualization be generated 100% from external sources, so the visualization stays updated automatically.

Define maturity levels for (the implementation of) business capabilities and business processes. Look at frameworks like CMM.

Work closely together with your stakeholder for which you create the visualizations, views and scenarios. The views and list of events, decisions and changes in the scenario should be understandable for the stakeholders.

On Dragon1, users will have the option to play the scenario automated and comment on every step. You can also create a video of the scenario animation. Be sure to ask for feedback from your stakeholders when you have published a visualization.

Usage

To make sure people in the organization use the Business Architecture diagrams, it is advised to do the following:

- Have the owner/client and stakeholders participate in the design of the Business Architecture and the creation of the diagrams and views. Have them comment on the diagrams and views.
- Educate them on the why, when and how of the architecture visualizations you are going to create. Try to have them order or ask for the visualizations and views because of their role.
- Focus on creating visualizations for 20 stakeholder-based viewpoints, so that 20 key stakeholders are interested to use the Business Architecture diagrams daily.
- Distinguish formal and informal diagrams. Informal diagrams, like diagrams about principles, are often useful to get the essence across to non-technical people.

- Have the architecture (concepts, principles, design guidelines and standards) get approved by C-level, an architecture board or another governing committee or body.
- Embed the architecture in policies. Make sure departmental plans, solution designs and project documents have to refer to the architecture and do: comply or explain.
- Make it very easy for stakeholders to access and comment on the latest updated architecture documents, visualizations, and views.
- Make it easy for stakeholders (checklists?) to audit, review or use a visualization in a meeting.
- Promote on the intranet the existence of the Business Architecture diagrams and place a Business Architecture awareness diagram on the intranet.
- Have the stakeholders follow the Dragon1 Viewer training.

Maintenance

To make sure the Business Architecture can be maintained, it is advised to do the following:

- Have 3 to 5 people follow training in the creation and maintenance of diagrams on Dragon1 and how to create views and scenarios.
- Define and draw a maintenance process.
- Create a maintenance plan and schedule when maintenance will take place.
- Develop a naming standard for all types of entities and make sure IDs are meaningless unique numbers and officially managed.
- Proactively contact the stakeholders and interview them on what they would like to have changed.
- Create interfaces with source systems, so that certain data is automatically updated in the repository.
- Try to automate the measuring of maturity of business capabilities and business processes.
- Design formulas on how to measure objectively how well business capabilities are implemented: present qualified people/job roles, processes (documented and audited), technologies and tools implemented.
- Ask if source documents can be put in a permanent place on the intranet or elsewhere.
- Make sure there is a list of source documents or source systems and that changes in the sources are communicated to the team. Make sure you have contact persons for all the sources and contact them regularly. This will enable you to quickly update changes.
- Monitor access to the visualizations and views by stakeholders. If certain visualizations and views are never accessed, ask the stakeholders what needs to be improved.
- Regularly reach out to stakeholders if they are in need of new visualizations and views.
- Optionally have third parties review your business architecture or ask them for a second opinion.

Maintaining a Process Catalog

Next to maintaining a business architecture dossier on Dragon1, it is a good practice to also maintain a business process catalog on Dragon1, often containing about 100 to 300 business processes modeled in BPMN.

A benefit of having a digital process catalog is that all the process diagrams are searchable.

Every process diagram will contain clickable links and connections to policies, procedures and protocols.

A process catalog helps to keep the processes consistent, to audit processes better, to redesign processes to be more efficient and train and refresh employees more efficiently.