



Building strong organizations

BiZZdesign

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Enterprise Architecture: What is it and why use it?

Rapidly and flexible adapting to changing customer needs and company goals is of vital importance to a growing number of organisations. As a consequence, changes in product, process, organizational structure, application and infrastructure are large, and need to be made clear upfront. Increasingly, enterprise architecture is being used to provide the required enterprise-wide view on strategic change. Enterprise architecture captures and visualizes the different business and IT domains and the relationships between them. As a consequence, impact-of-change analysis within and between these domains can easily be performed.

Clear communication within and between different stakeholders both from business departments and from IT-departments is extremely important to prepare and implement business change. Enterprise architecture is more than just modeling, visualizing and maintaining isolated architectures. When applied correctly, enterprise architecture provides clear means to provide insight in each architectural domain and the crucial relationships between these domains. As a consequence, impact-of-change analysis within and between these domains can easily be performed. Moreover, enterprise architecture facilitates assessing and reducing the cost and risks of change.

We state some good reasons to start using Enterprise Architecture:

- Reducing the time to market of new products and services
- Checking feasibility of application migrations
- Assessing and reducing costs and risks of change
- Aligning business and IT
- Getting grip on IT-governance
- Compliance with corporate governance regulations
- Enabling new business opportunities
- Leveraging company data
- Flexible insourcing, outsourcing, partnering

Support for Enterprise Architecture

To get a grip on enterprise architecture, a clear vocabulary and modeling language are indispensable. This vocabulary and modeling language should be understood by different stakeholders. Such a modeling language enables a company-wide enterprise architecture map.

Changes in this map will take place often and need to be managed quickly and coherently. Manual maintenance with support of simple diagramming tools and spreadsheets is practically impossible due to the numerous and complex interdependencies. An enterprise architecture tool provides capabilities to model, structure and visualize the enterprise architecture contents in different ways. An enterprise architecture repository stores and manages this enterprise architecture information, providing views, queries, reuse, access control and versioning to a variety of different roles and projects.

Last but not least, enterprise architecture is not a goal in itself. It is meant to support you in achieving goals like mentioned above. Clear methods, best practices and frameworks will help you reach these goals and will guide the proper use of language and tools.

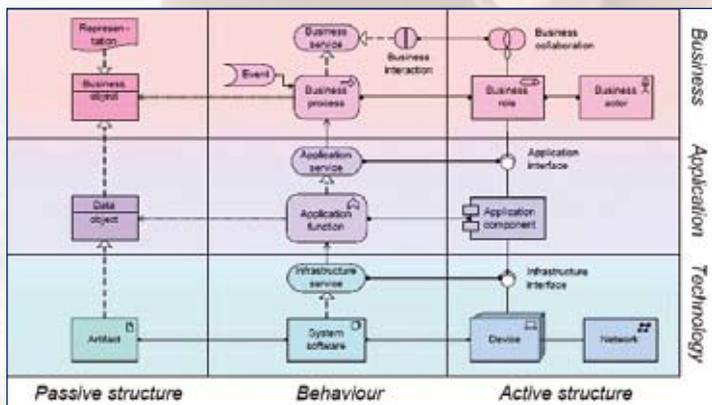
Enterprise architecture is the complete and consistent set of methods, rules and models, which will guide the (re)design, migration and implementation of business processes, organizational structures, information systems and the technical infrastructure within an organization.

The language ArchiMate®

In current practice every business and technical domain speaks its own language, draws its own models, and uses its own techniques and tools. Communication and decision making across domains, necessary for business change, is thus seriously impaired.

ArchiMate® is a language for modeling and visualizing enterprise architecture that deals with these issues. The core of ArchiMate is a design language to model business and IT architectures in coherence with each other. Next to the design language, ArchiMate offers a range of techniques for visualizing, analyzing, designing, and using enterprise architecture to solve business change. ArchiMate provides the enterprise architect with architectural instruments for supporting and improving the business change process. These instruments help the architect in communicating with all stakeholders involved, ranging from managers to software developers.

The main concepts of ArchiMate are shown in this figure. These concepts fully fill in modeling and analysis needs for frameworks like Zachman, IAF, TOGAF, DoDAF, etc. The visual representation of the concepts can be adapted to adhere to company preferred standards.



The ArchiMate language has been developed by a broad consortium from industry and academia, and is already widely used in the Netherlands, making fast progress in Europe and being adopted by international standardization organizations. For more information see www.archimate.com.

The tool BiZZdesign Architect®

The design, analysis, visualization and maintenance of enterprise architecture requires tool support. Using only simple diagramming tools and spreadsheets is practically impossible and insufficient due to the complex interdependencies within enterprise architecture. Stakeholders require different and flexible visualizations of (parts) of the architecture, which are almost never possible using Office-like tools. In particular the inter-domain relations in enterprise architecture are very hard to model, visualize and maintain in Office-like tools.

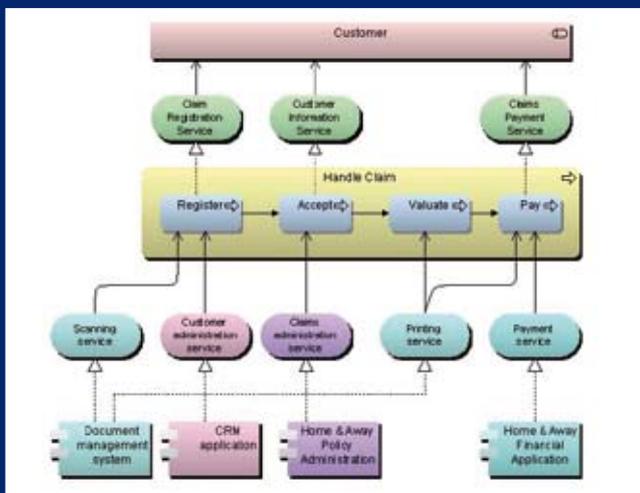
This is where enterprise architecture tools come in place. An enterprise architecture tool provides capabilities to model, structure and visualize the enterprise architecture contents in different ways, dealing with inter-domain relationships in the right way.

BiZZdesign Architect® is a complete and unique solution for enterprise architecture, consisting of a tool, repository, methods and techniques, consultancy and training. Architect supports modeling and visualizing enterprise architecture, including visualizing and analyzing relationships and dependencies between architectural domains, impact of change analysis, etc. The tool can be easily configured to capture other relevant information. Architect fully supports the ArchiMate modeling concepts. Architectural frameworks and approaches like Zachman, Tapscott, TOGAF, DYA®, IAF and March® and variants can be fully supported by Architect.

BiZZdesign Architect is often selected because it is very easy to use, has powerful visualization features, appeals to both business and IT stakeholders in an intuitive way, support best of breed frameworks and is easily extendible to map adjacent information.

Architectural domains and relations

Architect supports several architectural domains, on multiple levels of detail: products and services, business functions, business processes, organization, applications, infrastructure, and data. Users can decide and configure which architectural domains and which properties to model. Besides objects in these domains one can also add key items such as business goals and objectives, programs and projects, architectural principles, critical success factors, and relate these to (the objects in) the architectural model. This enables, for example, visualizing the relationship between critical success factors or architectural principles with other objects in the enterprise architecture.



Input

An advanced graphical editor facilitates easy drawing of architecture models. An even simpler and quicker way is to import tables from Office applications, enabling for instance the import of all applications in a single step. One can effectively add and maintain relationships between architectural domains by drawing relationships or by adding checkmarks in an automatically generated cross reference table, for instance to express that an application support a certain business process and uses an infrastructure service.

Viewpoints and views

Architect automatically generates views visualizing objects and relations from the repository. Automatic layouting supports one-click generation of attractive overviews of (parts of) the architecture. Architect allows you to define your own viewpoints, on the basis of which views can be created or generated.

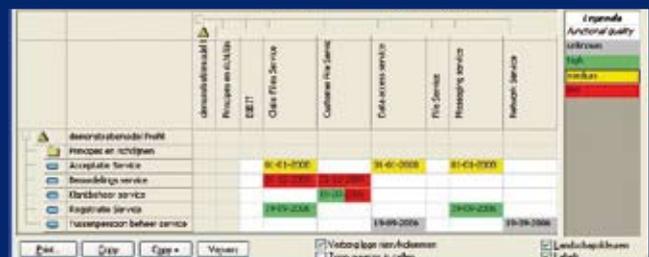
In a viewpoint one defines which concepts and relationships are shown, in what way, in that particular view. This mechanism enables effective and efficient communication with different stakeholders.

Impact analyses

Architect supports impact of change analyses. Examples are replacing an application, changing a product, changing a business goal or an architectural principle, or renewing an infrastructure component. The impact of change analysis makes clear what the impact of such a change is in which part of the architecture.

Landscape maps

So-called landscape maps facilitate "stacking" relationships and dependencies in a map-like overview (such as 'which departments use which applications in which processes'). Architect shows direct relationships, and also deduces indirect dependencies in the enterprise architecture.



Publication

All models (or parts of it) can be directly published on an intranet or in Word. By choosing which part of the model and which properties of model elements are published, the publication can be precisely aimed at the relevant stakeholders. Also the style and markup of the publication can be determined by the user. Reading these publications does not require tool licenses, the usual Office applications or Internet Explorer suffice.

Repository

Architect uses a repository based on Oracle or SQL Server to store models. This repository supports version management and enables multi-user support and role-based authorization. For smaller organizations, Architect is also available with a repository based on a shared file. All solutions are upwards compatible. Thus you can choose and grow depending on your goals.

Steps in establishing a viable enterprise architecture

How to get started using enterprise architecture in your organization? The following road map gives a way to start using enterprise architecture, supported by ArchiMate and BiZZdesign Architect.

Step 1 *Pilot case architecture*

Start with a short pilot case. This case should realize a quick win, like giving insight in an urgent problem, or visualizing current developments within the organization. Make clear that a small investment in enterprise architecture, ArchiMate, and Architect creates added value for your organization. Training on ArchiMate and Architect is part of this pilot. Make sure to buy in support from higher management on the basis of this success. Communicate!

Step 2 *Matching concepts and describing current architecture*

When the pilot case is finished successfully, you have to ensure that different groups within your organization start using the same modeling concepts to describe their architectures. Training and coaching is necessary to achieve this. After the initial training, coaching by an experienced ArchiMate and Architect user is advisable in order to use ArchiMate and Architect in a clear and efficient way. In this phase it is often useful to describe the current (as is) situation, to get familiar with the ArchiMate language, and to use this language throughout the whole organization. The use of Architect enforces uniform and unambiguous descriptions of the enterprise architecture. Communicate your steps!

Step 3 *Coherence within the architecture*

The next step is to model the relations between the different parts of the enterprise architecture. For instance, one can start modeling business processes, followed by modeling the applications supporting these processes. Based on these applications, the required infrastructure can be modeled. Modeling these elements in Architect enables you to create visualizations of the enterprise architecture as a whole, and of the coherence between the different elements in the architecture. Communicate the added value of enterprise architecture for business change!

Step 4 *Implement architecture within the organization*

Make someone responsible for managing the procedures and models of 'working under architecture'. Make ArchiMate and Architect the standard language and tool for describing enterprise architecture. Adjust your design processes to ensure that new designs are always checked against the enterprise architecture and the architectural principles of your organization. Communicate the future role of enterprise architecture!

Step 5 *Use architecture for future situations*

When architects become more experienced with ArchiMate and Architect, they should start using ArchiMate and Architect for modeling future, to-be, situations. Planned changes within the organization can be checked against the future enterprise architecture. Proposed changes should be analyzed on feasibility and impact of change before they are actually implemented. Show how this works to all stakeholders involved!

Of course, the use of ArchiMate and BiZZdesign Architect is not a goal by itself. They are just means to help you achieve the goals mentioned in the introduction. The BiZZdesign methods and best practice for enterprise architecture help you achieve just that!



BiZZdesign offers integrated suites for both Enterprise Architecture and Business Process Management. These integrated suites consist of proven and easy to use tools, best practice approaches, training and business consultancy.

BiZZdesign consultants advise and train leading corporations and public authorities on both Enterprise Architecture and Business Process Management.

The integrated BiZZdesign tools: Architect and BiZZdesigner, for both Enterprise Architecture and Business Process Management, have been licensed to numerous customers world-wide.

For more information please contact BiZZdesign. We help you build a stronger organization!



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