

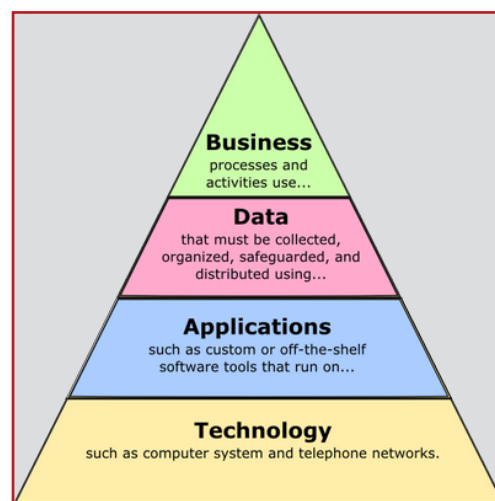
Architecture, Who is responsible?

Who is responsible for the Architecture of the organization, the CEO or the CIO? In the information age, IT has a great influence on the way enterprises work. Over the years we developed organization structures, IT systems, business processes etc. to take advantage of what IT has to offer. Today we face the challenge of 'change on demand' where the time-to-market has to be reduced to a minimum. Who is responsible for the architecture that enables us to accomplish this way of doing business?

Before we can answer this question, we need to define what we mean by Architecture (see *part 1 in this series: Architecture what and why*). In this case we use the definition John A. Zachman gave us:

“Architecture is the set of descriptive representations relevant for describing a complex object (actually any object) such that an instance of the object can be created and such that the descriptive representations serve as the baseline for changing an object instance (assuming the descriptive representations are maintained consistent with the instantiation).”

Basically Architecture helps you to Engineer something.



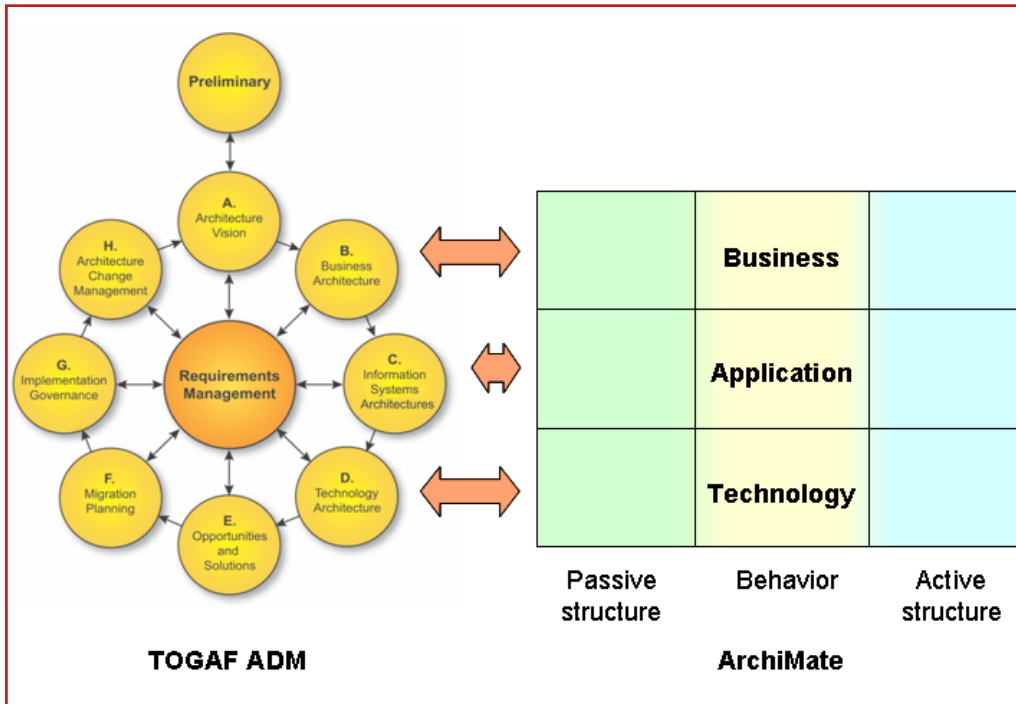
Simplifying

There can be more than one architecture (view) to define an enterprise. For example if we look at TOGAF of The Open Group, there are four architecture domains as a subset of an Enterprise Architecture (*Open Group Standard TOGAF® Version 9.1*) :

- The **Business Architecture** defines the business strategy, governance, organization, and key business processes.
- The **Data Architecture** describes the structure of an organization's logical and physical data assets and data management resources.
- The **Application Architecture** provides a blueprint for the individual applications to be deployed, their interactions, and their relationships to the core business processes of the organization.
- The **Technology Architecture** describes the logical software and hardware capabilities that are required to support the deployment of business, data, and application services. This includes IT infrastructure, middleware, networks, communications, processing, standards, etc.

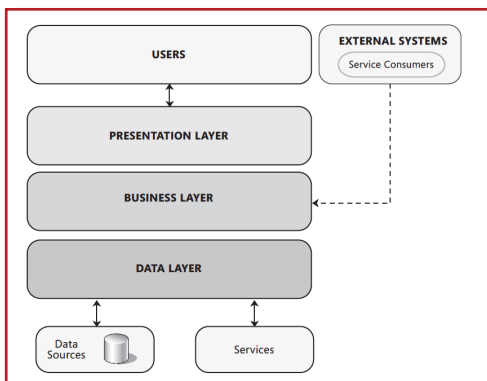
In modeling architecture we often find three layers (as in the Archimate modeling language of The Open Group):

1. Business
2. Application
3. Technolog



The three layers are supported by different modeling languages and tools. Within the IT domain it is also common to divide application architecture in three different layers (<http://msdn.microsoft.com>):

- Presentation layer
- Business layer
- Data layer



from Microsofts Application Architecture Guide v2

There are a lot more divisions within the IT domain like: tiers, layers and views, available in different models and methods, which all are (partial) descriptions of an architecture.

One way or the other we attempt to simplify the way we look at the real enterprise, to be able to comprehend its complexity. This is why we use, subsets, layers, tiers, views etc. as an intersection of reality. In doing so we accomplish simplification by specialization. We can assign responsibilities and let specialists draw us an architecture for one of the intersections. Of course this introduces an integration challenge. How do the different intersections, with their architecture models, interact? And who is responsible for the integration?

Responsible or Accountable

If we look at the Enterprise, Business Architecture is the highest level in the three-layer approach. With Business Architecture we look at the descriptive representations for the Business. Without providing the 'one and only definition' of Business, we assume it is about customers, sales and processes. This is row number 2 of the Zachman 3.0 framework. The Zachman framework uses a more fundamental approach to create and integrate the different architecture views of an Enterprise

(on which later more).

Business is more likely to be the responsibility of the CEO than it is the CIO's responsibility. However, the CEO has the responsibility of the entire Enterprise, which entails more than only Business. Therefore we talk about the Enterprise Architecture as a responsibility for the CEO. And because operational this is too much for the CEO, he needs to delegate parts of his responsibility. Therefore responsibility is not the right qualification and we should use the more appropriate term accountability. This enables us to delegate the responsibility for (parts of) the Enterprise Architecture without reducing the accountability of the CEO.

IT provides the competence

In the three-layer model you will find Business Architecture, and even the entire Enterprise Architecture (all three layers), is often created by the IT part of an Enterprise. This is because:

- Awareness of Architecture tends to surface in the Enterprise through the IT/Systems community.
- IT people seem to have the skills to create the different Architectures.

If the Enterprise Architecture is entirely created in the IT department, as an accountability of the CIO, there are some serious risks:

- IT people (the writers of the Architecture) are 'only' human, there is a risk of creating an IT biased EA description, reinforcing the misconception EA is only about IT.
- An IT biased Architecture tends to solve IT problems that might solve business solutions, which should be the other way around.
- Although IT has a big influence on the enterprise, it also tends to reduce the Enterprise in EA to the IT domain, this is far too narrow.



So, if IT is needed to create and maintain the business architecture, it might be a good approach to see Business Architecture as the Accountability of the CEO and the (delegated) Responsibility of the CIO. It is only logic to delegate the responsibility of the technology and application architecture to the IT domain e.g. the CIO. But if we also delegate the business architecture to IT, we create the risks mentioned above. These risks are only mitigated by keeping the business architecture the accountability of the CEO!

Zachman rows

In the context of Enterprise Architecture we might want to look at the Zachman framework again. Here we see an Enterprise Architecture divided in six views (rows) of the entire Enterprise.

1. **Executive perspective**
(Identification, Scope Context)
2. **Business Management perspective**
(Definition, Business Concepts)
3. **Architect perspective**
(Representation, System Logic)
4. **Engineer perspective**
(Specification, Technology Physics)
5. **Technician perspective**
(Configuration, Tool Components)
6. **Enterprise perspective**
(Products, Operations Instances)

Each row enables us to create fundamental models from its own perspective. These models only contain the information relevant for its view.

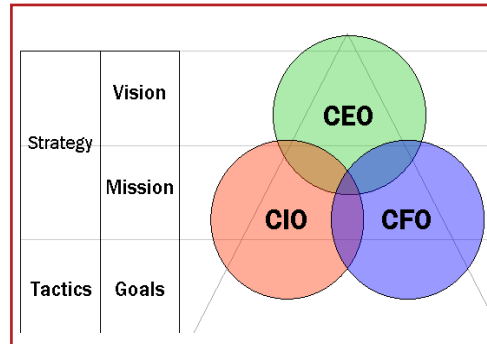
Between the rows we speak of a transformation, for example from the Business (row 2) to the System (row 3), from the Technology (row 4) to the Tooling (row 5). These transformations provide us the opportunity to define the relationship between rows, solving the integrations challenge.

Delegation

This means the CEO is accountable for the Enterprise Architecture, the scope of the Zachman framework (row 1 to 6) and delegates parts of these responsibilities (row 2 – 5) to the CIO.

Row 1 is the executive Perspective and therefore it cannot be delegated, row 6 is the Enterprise perspective (the instantiation) and therefore the CEO should want to keep this responsibility as well.

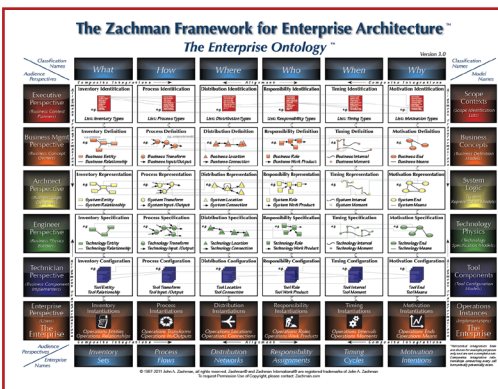
The CIO in his turn, might want to delegate parts of the inherited responsibility (which becomes his/her accountability) to the lead architect.



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JZZ-3d has a broad experience with developing business solutions and IT. We have an unparalleled understanding of the importance of IT within an enterprise.

We're specialised in applying the Zachman 3.0 framework to solve current integration problems and prepare enterprises for the demanding future.

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