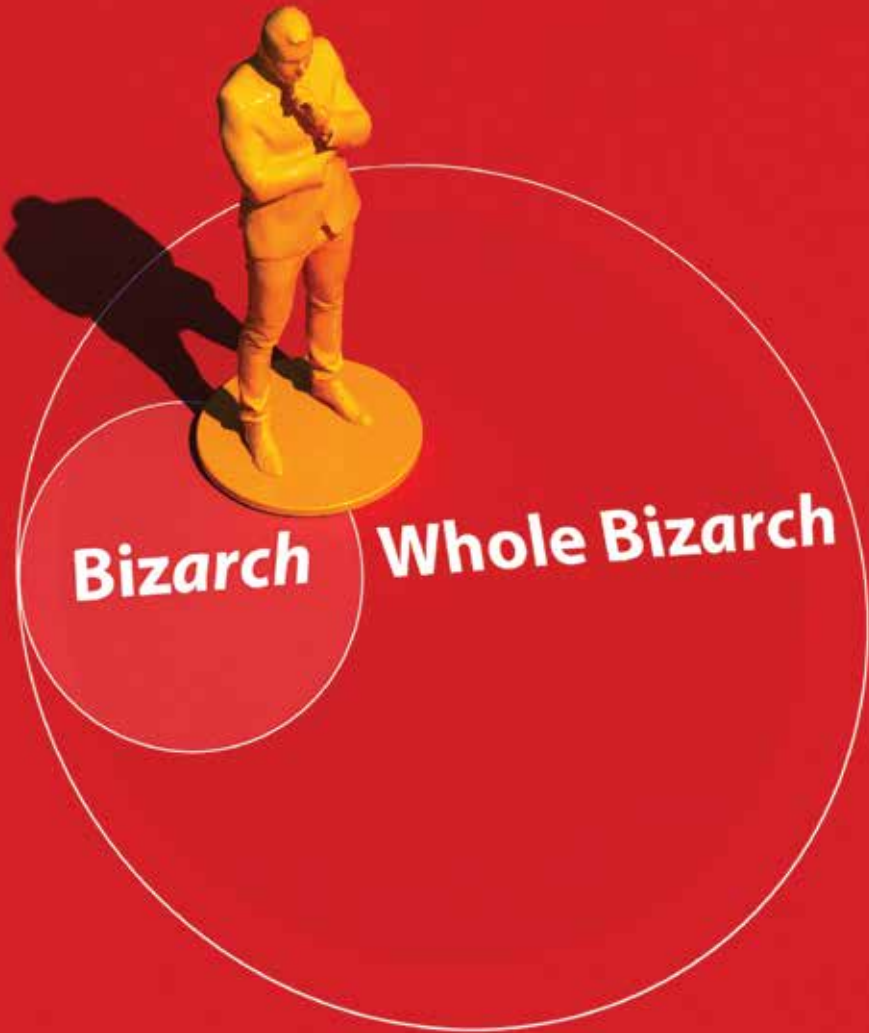


Whole Business Architecture

Exploring the context of Business Architecture



Tom Graves

Whole Business Architecture

Exploring the context of Business Architecture

"A must read for all business architects whether starting your journey or as a reference for the more experienced amongst the fraternity."

**Robert Mckee-retired Business Architect at ABSA Bank,
South Africa.**

"Tom's book will be a valuable resource for those evolving into or practicing as an enterprise business architect or whole-of-business enterprise architect. More importantly, the book will be useful to business leaders and strategists responsible for organisational culture and structure needed to deliver execution of the business strategy."

**Rajeev Arora, SystemSmiths, Lead Enterprise Architect,
including at DOD, Australia**

"I thoroughly enjoyed Tom's "Whole Business Architecture" especially as it touched upon core prevalent themes in today's world, in our enterprises, and in our businesses. I would highly recommend anyone in the field of enterprise architecture and business architecture, in leadership, and in business, to read this material."

**Norman Carr,
Enterprise Architect and Independent Consultant, Canada**

Tom Graves



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What is *Whole Business Architecture*?

'Business'-architecture is often defined as a subset of 'enterprise'-architecture, which itself is misdefined as a subset of IT-governance. This book looks at how business-architecture fits into the wider context of an enterprise.

In this book an **business** is defined as:

The main activity of an organisation, such as providing a service or product, while making a profit.

And **architecture** is defined as:

The structure and story of how everything works together as a whole. In an airport, for example, a building architect would tackle the physical aspects of the building, the air-conditioning, doors etc. A solution architect would typically tackle the IT aspects of the airport, such as the software needed to run the airport, assisting: visas, luggage, information flow and much more, while an business architect would tackle all of the parts of the business, connecting the boxes.

So **Whole business architecture** is defined as:

The architecture of '*the business of the business*', and how it connects with all the other architectures aided by enterprise-architecture, whose role is to ensure that all the different architectures work well together.

This book is a collection of edited articles which pose important questions about business-architecture. In addition, illustrations help explain key concepts to help you better architect your business.

This book acts as a bridge to a huge library of work produced over thirty years in the field of business architecture and as a companion to the book: **Whole Enterprise Architecture**.

Most of the chapters reference more '*in-depth*' articles which can be found in a set of anthologies at www.leanpub.com/u/tetradian.

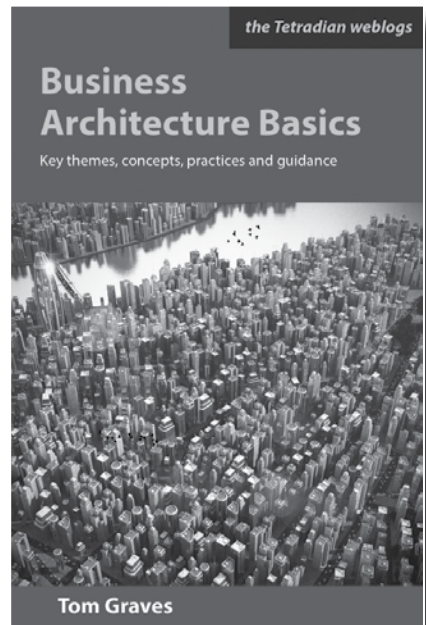


Tom Graves has been an independent consultant for more than four decades, in business transformation, enterprise architecture and knowledge management. His clients in Europe, Australasia and the Americas cover a broad range of industries including small-business, banking, utilities, manufacturing, logistics, engineering, media, telecoms, research, defence and government. He has a special interest in whole-enterprise architectures for non-profit, social, government and commercial enterprises.

Part 1:

Business-architecture

This section of the book is an abridged version of ***Business architecture basics'***
www.leanpub.com/tp-bizarch



1: What do we mean by *'business-architecture'*?

One of the keys to breaking free from IT-focused *'enterprise'*-architecture lies in reclaiming the meaning of the term *'business-architecture'*.

In *'classic'* enterprise-architecture, everything revolves around IT: the IT is seen as the centre of meaning within the enterprise.

'Business'-architecture is defined as a subset of *'enterprise'*-architecture, which itself is defined as a subset of IT-governance. And in practice, business-architecture is viewed as a near-random grab-bag of *'anything not-IT that might affect IT'*, without any real clarity about how that grab-bag is structured within itself, and with no acknowledgement at all about anything that might not affect IT. Certainly not something that we could use at an enterprise level.

So the first step outward is to start to treat business-architecture as a form of architecture in its own right. That's starting to happen now. People are at last beginning to break free from the trap of focusing solely on IT.

Yet there's another trap that comes right after that one, that a lot of people are falling straight into it: Business-centrism. Where *'the business'* is seen as the centre of the architecture, around which everything else revolves. In a true enterprise-architecture, everywhere and nowhere is the centre. It has to be that way: otherwise it is **not** an enterprise-architecture.

Which means that, to quote the late Len Fehskens, *"Business-architecture is merely a domain-architecture, one of many other domain architectures, just like IT-architecture is a domain-architecture (or a cluster of related domain-architectures, rather)"*. It is a subset of *'the architecture of the enterprise'*, with responsibility for an explicit domain of interrelated concerns within that overall scope.

To me it is literally **the architecture of the business**, in other words, *'the business of the business'*, how its core business is organised and structured, usually at a fairly abstract level. *Like most domain-architectures, it typically focusses at Zachman level-3, 'Logical'*.

Given that description of boundaries, a core part of that structure represented by and maintained in the business-architecture is the business-model (or set of business-models). In the Osterwalder sense, which is the one I use here, though in perhaps a more extended sense than in Osterwalder's Business Model Canvas. A *'business-model'* is a structure, one that provides the central focus for *'the business of the business'*.

1. Zachman levels

See *Whole EA*, page 36, for more information about Zachman levels.

It is not much about vision or values, or strategy, those are inputs to the business-architecture.

It is not much about the details of business-process: that is the role of process-architecture (*these days often known as BPM, Business Process Management*), or IT-architecture, or often both in parallel.

It is not about the physical structures in which those processes take place: that is the role of facilities architecture, or the literal architecture of buildings. It is not about the skill-sets or organisational structures to operate or manage those processes: that is the role of HR and organisational-architecture. And so on.

Business-architecture **is** about the architecture of *'the business of the business'*, and how it connects with all the other architectures aided by enterprise-architecture, whose role is to ensure that all the different architectures work well together.



People are breaking free from the trap of focusing solely on IT, yet there's another trap that comes right after that, Business-centrism.



2: Business-architect and Enterprise-architect

Enterprise business-architecture is an important aspect of enterprise-architectures; done properly, it is not an IT-role. But at present it is still all too often portrayed as such; and the relationships between the various roles have become blurred and confused. To the point where that confusion is causing a lot of damage to organisations and their business-related architectures, and to the profession as a whole.

The core of the problem is two issues:

- *portraying enterprise-architecture as a minor subset of IT-governance*
- *portraying business-architecture as a kind of random grab-bag of 'anything not-IT' that might affect IT*

Many are aware of these issues including, the late *Len Fehskens*, who had been fighting this particular battle for even longer than I have.

His description of roles is really useful here: **xA**, **ExA**, **EA** (*about which more in a moment*). In essence, the architect's role consists of bringing things together into some kind of unified whole, for a chosen purpose.

The key point is that to understand and describe the role, we need to understand both its scope (*or 'width'*) and its direct skill-level (*or 'depth'*).

A domain is a region of scope and expertise: for example, IT-infrastructure, security, brand, organisation, process, logistics and so on. In *Len's* description, '**x**' is any specific domain:

- **xA** (*e.g. an applications-architect or brand-architect*).
A domain architect, with emphasis on a single domain or closely-related cluster of domains, almost always with high skill-level (strong depth) in that domain.
- **ExA** (*e.g. EBA, 'enterprise business-architect'; EITA, 'enterprise IT-architect'*).
An enterprise-scope domain-architect, with emphasis on how a single domain links with other domains; the skill-level is sometimes referred as 'T-shaped'; deep-skill in one domain, but sufficient knowledge of other domains to be able to support good ability to converse with other domain-architects and other specialists from those other domains.
- **EA**: *An enterprise architect is a specific domain-architect whose domain is the enterprise as a whole, and for whom the core skill-set includes cross-context specialisms such as systems-theory, human-factors, futures, strategy and other 'big-picture' themes; the skill-level across domains tends to be broad rather than deep ('comb-shaped' rather than 'T-shaped'), but must include all domains that are in scope for the enterprise.*

In most countries, by law, the only people who can describe themselves as '*architects*', without any other qualifier, are building-architects. Everyone else in all other cross-context linking or cross-domain-linking professions must use some kind of qualifier, for example: naval-architects, civil-architects, security-architects and, of course, enterprise-architects.

What some have done is to completely scramble that description: routinely, an IT domain-architecture or, at best, an **EITA**¹ is labelled as an 'EA', with business-architecture. What should be a domain that is business-focussed and functionally distinct from IT, is parked randomly 'under' the IT-focused 'EA' banner. Meaning that 'business-architecture' is simultaneously both 'below' and 'above' that 'enterprise-architecture', making an unusable mess.

Unfortunately it may well be true that 'business' architect is currently described as an IT role. But it really doesn't help to do so. Every one of us needs to be clear about this, because it is probably the primary cause of damage to the profession at present.

Business-architecture is a distinct domain, the architecture of 'the business of the business', that must not be seen as 'above' the scope of the broader shared enterprise in which the business operates. By definition, it's 'under' EA, because EA provides the overall umbrella under which everything connects with everything else. But when only IT-architectures are described as 'EA', then there are some circumstances in which BA or EBA is 'above' that kind of 'EA'. Yet also circumstances when they're not, given the way that some describe BA and EA. Which again adds to the mess...

Which is where we come to the second issue : *Defining 'business-architecture' as 'anything not-IT that might affect IT'*. No wonder that business-people get seriously annoyed at IT-centric 'EA' and its description of 'business'-architecture that makes no business sense.

So we have many in the 'enterprise-architecture' space, describing an 'enterprise architecture' that isn't about the enterprise as enterprise, and a 'business-architecture' that has very little connection with the business of the business.

It may be 'realism' to say that "Business Architect, nowadays, sadly, is an IT job", but it is not wise to allow that misnaming to go unchallenged, because the consequences are very serious indeed.

1. EITA

Enterprise Information Technology Architecture



Taken from the chapter: **Business architect and enterprise architect**

3: Business-architect or Enterprise-architect, part 2

I do not have any problem with the term '*Enterprise Business Architect*', I think it is an entirely valid description of an architectural role. Let me explain.

There is a role called '*architect*'. Someone whose job it is to link various things together in a consistent, integrated, maintainable and sustainable way. It could be any area at all, any focus or interest: as long as it's linking more than a couple of different types of items together, you could just about get away with calling the role an '*architect*'.

Often we will find there's a prefix, specifying a technology, or a domain of interest, or something like that. In more detail we will see titles like *Siebel architect* or *web architect*. Going up a level or two, we will see more emphasis on the domain: *process-architect*, *security-architect*, and so on.

Each of these roles has a strong specialist element, emphasising the particular domain of interest, and usually a lot of in-depth knowledge and skills in that specialism. But they're more than just specialists. They are what we might call '*T-shaped*': a lot of depth in one domain, but also a bit of depth in a range of other domains too. Which is what gives them the ability to make links between domains, and makes them '*architects*'.



Architects have a lot of depth in one domain, and a bit of depth in others.

And each of these domain-architectures requires its own distinct skill-sets, each with their own distinct terminologies and concerns. And the depth required is such that they are often incompatible with each other, too. But an '*architect*' is someone who can link across those incompatibilities. Then we will sometimes find that there is a need for a scope-prefix on the name, of which the most common is the term '*enterprise*', meaning that the work has an enterprise-wide scope. This scope-prefix, if present, should always come before the domain-prefix. For example '*Enterprise Siebel-architect*' compared to '*Siebel enterprise architect*'.

The point is that there's a special-case, where it's not that the domain has a specific scope, but that the scope itself *is* the domain.

To use a term coined by *David Armano*, we could describe these architects as '*sun-shaped*'. They are true generalists, linking across every sub-domain within that scope. And that's a distinct skill-set in itself, radically different from the domain-specific skills of the '*T-shaped*' domain-architects. The only person who should be called an '*enterprise architect*' is one whose domain is the entire scope of the enterprise.

To me a business-architect is a domain-specialist: someone who specialises in the architecture of '*the business of the business*'.

These are typically people who've expanded outward from business-analysis. By which I mean '*the analysis of business*', in-depth financials and so on, not the IT-oriented notion of "*someone who gets IT requirements from 'the business'*". They have learnt enough of other domains to act as architects, but their real focus will be in '*business*'-type themes such as business-models, investment-planning, financial modelling and so on.

These business-architects are specialists, with distinct business-oriented specialist skills. A business-architect will typically work within one business-unit, or perhaps a whole company within a conglomerate. An enterprise business-architect is one who would cover the whole portfolio of the business-as-enterprise. But it is still business-architecture, '*the architecture of business*', it doesn't move much outside of that domain. For example, it would not usually cover IT-implementation, or detail-level process-design, and so, it's about '*the business of business*'; and not much more.

But an enterprise-architect covers the entire scope: every domain, at every level. The role also covers a scope that can extend much further out than that of the business-architect. An enterprise-architect must be able to separate the organisation and enterprise where required. Extending the enterprise-in-scope beyond the legal-responsibility boundaries that define the organisation, to encompass:

- *the supply-chain*
- *the market*
- *the direct business-ecosystem*
- *the community*
- *government and sometimes even further than that.*

The time-scales may also be much longer than those of the business-architect: the latter may well be concerned with a five-year strategy at most, whereas environmental and other concerns mean that the enterprise-architect may at times need to consider an indefinite or even infinite timescale.

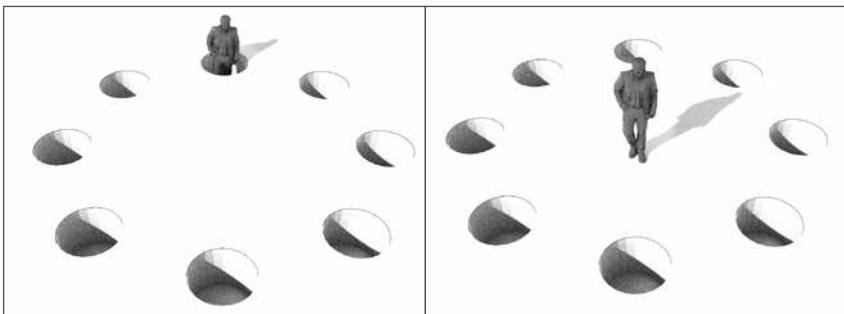
An enterprise-architect must also be comfortable working at any level, from the board-room to the factory-floor, from operations to tactics to strategy and beyond; and with concerns that may be deep within and/or far beyond

the organisation itself. This demands a skill-set that is broad rather than deep, focussed on interconnections more than on item-detail, an unusual ability to learn the basics of any skill or domain very quickly indeed. This is a very different skill-set from that of the 'business-oriented' business-architect. I don't think I have ever met anyone who truly managed to combine both sets of skills in their personal portfolio, and I don't think it's fair to expect anyone to do so, especially across all of the complexities of a typical large organisation.

What worries me somewhat is that the role of business-architect is likely to become confused with that of the true enterprise-architect. We used to see a lot of IT-architects who called themselves 'enterprise-architects'; yet who really were not aware about anything that happened outside of IT. Which could lead to problems as soon as they tried to tackle a true enterprise-architecture scope.

A domain architecture is centred on that domain (*and arguably should be, too*); but an enterprise-architecture has to cover everything, as exact equals, everywhere. That is what makes it different. That is also what makes it hard to do.

So yes, there is a real role called the Enterprise Business Architect. It can be done by the same person who does the role of Enterprise Architect; but in practice it's usually not a good idea to try to do that, because the skill-sets that the roles require are so different from each other.



Domain Architecture (left) is focused on a specific domain, while EA (right) looks in less detail at **all** domains of an enterprise.



Whole Business Architecture

Exploring the context of Business Architecture

Business Architecture is often seen as only part of IT, yet really it is about the business of business. Is your Business Architecture serving the wider enterprise? *Whole Enterprise Architecture* follows on from *Whole Enterprise Architecture*, written by the same author. In this book, through a set of approachable articles, Tom guides you through the aspects of Business Architecture and the wider context of which it is part. Illustrations and diagrams describe key concepts to help you make your business become more effective.

"Whole Business Architecture by Tom Graves is a great reminder of how broad the scope of architectural effort really is. Or at least should be. It is a must-read for those wanting to architect the sense of their organization within the shared enterprise."

Vítězslav Antoš, Senior Business Architect, Československá obchodní banka, Czechia

"This book allows you to go deeper into the business domain. It provides an end-to-end approach to enterprise architecture with many different perspectives. It contains great visuals that allow us to immerse ourselves in the different concepts and ideas given by the author."

I would certainly recommend this book to any enterprise architect who needs help in creating a vision of the future enterprise and describing its shape to others."

Gregory Boissinot, Architecte d'entreprise, La Poste Groupe, France La Poste Groupe

