

Enterprising Your Architecture

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Enterprise Architecture (EA) is **the inherent design and management approach essential for organizational coherence leading to alignment, agility and assurance**. There is always architecture in place in an enterprise, and hence EA is really about the **mastery of the architecture of the enterprise**. A well-architected, well-functioning and well-documented enterprise is a **coherent enterprise**.

This definition is taken from the newly published book¹, *Coherency Management: Architecting the Enterprise For Alignment, Agility and Assurance* (editors Doucet, Gøtze, Saha & Bernard).

The book discusses a new way to look at Enterprise Architecture. **Coherency Management** represents a significant point of evolution in the design and management of all enterprises. This includes, and is especially beneficial for, highly dynamic organizations, that sometimes have chaotic operating environments. The concept of Coherency Management is about using EA to advance alignment, agility, and assurance in large, complex organizations. The essence of this concept is that the architecture (words and pictures) of enterprises should become consistently structured, formalized, used to attain coherency. The best way to do this is to adopt EA as the ongoing, overarching method for describing, abstracting, analyzing, designing, and re-engineering new and existing enterprises-regardless of the market, industry, or government sector. Most importantly, it is about EA becoming pervasive.

With submissions from over 30 authors and co-authors, the book reinforces the idea that EA is being practiced in an ever-increasing variety of circumstances – from the tactical to the strategic, from the technical to the political,

¹ www.coherencymanagement.org

and with governance that ranges from sell to tell. The characteristics, usages, value statements, frameworks, rules, tools and countless other attributes of EA seem to be anything but orderly, definable, classifiable, and understandable as might be hoped given heritage of EA and the famous framework and seminal articles on the subject by John Zachman over two decades ago. With a foreword by John Zachman himself, the book views EA as an Enterprise Design and Management approach, adopted to build better enterprises, rather than a IT Design and Management approach limited to build better systems.

Modes of Enterprise Architecture

The most common and classical form of EA is what we call **Foundation Architecture**. The EA is most often done to align IT to the business. The Foundation Architecture can be seen in the most widely accepted definition of EA provided by Ross, Weill and Robertson where “EA is defined as the organizing logic for an organization’s core business processes and IT capabilities captured in a set of policies and technical choices, to achieve business standardization and integration requirements of the firm’s operating model”. Another idea about EA, we call it **Extended Architecture**, came about in the late 1990’s and focused on engineering an entire enterprise from integrated strategy, business, and technology perspectives. To support this expanded view of EA, a number of approaches and tools were developed to provide standardized, repeatable methods for describing an enterprise in all dimensions – beyond just the IT perspective. Whereas Foundation Architecture used architecture methods and tools to capture business requirements in order to design better IT systems, in the Extended approach, architecture methods and tools capture strategic goals and related business requirements in order to design the enterprise.

In the Foundation and Extended modes of EA, artifacts (various types of documentation) are created as the result of an EA process or method, somewhat extraneous to the functioning enterprise. But what if architecture tools, methods, and models became embedded in the normal (usually existing) processes of the day? We call this **Embedded Architecture**, where the architecture, rather than relying on processes and people extraneous to the business programs (and their processes), is produced by the processes themselves. In this way the architecture is organic and ever greened naturally.

Balanced Architecture is a term that we use to describe when an enterprise utilizes the best and the most appropriate characteristics of each of the three modes of EA. It is unlikely that any organization has yet reached a level of maturity in their EA program, so as to have a truly balanced architecture state.

The three distinct modes of EA – Foundation, Extended and Embedded – show how EA is, or can be, practiced. Foundation is where there is an enterprise-wide view and plan for technology and in more advanced enterprises there is use of Enterprise Business Architecture to ensure the technology and business are well aligned. This is the predominant form of EA practiced today.

Extended is where the science, tools and techniques of EA are extended into (and used by) all parts of the enterprise to design/describe much more than technology. For example, it could be used to help design better policy or build better organization charts or improve service descriptions. Embedded is where EA science, tools, and techniques are ingrained in everyday processes and people contribute to the overall EA without being Enterprise Architects or necessarily knowing that they are contributing to the EA work. For example, the budget line items are conformant to EA standards which allows parts of the Enterprise's Architecture to be updated on a regular basis but by people doing budgets not EA. The classic Enterprise Architect then (in addition to former duties) also ensures the artifacts created by the various process owners adhere to and contribute to an overall EA effort.

I am quite convinced that we in the coming years will see more and more enterprises moving beyond the Foundation mode, and embrace the Extended and Embedded modes, and hopefully reach a balanced architecture, where the right combination of Foundation, Extended and Embedded ensures that you have a coherent enterprise.

Why EA in the first place?

Current literature in EA list several benefits like business-IT alignment, standardized business processes, business and process flexibility, business transformation, IT cost reduction, operating cost reduction, application maintenance cost reduction, business risk management, senior management satisfaction, quality of service improvements among many others. But these are all intermediate benefits contributing towards the three primary benefits and outcomes: Alignment, agility and assurance; alignment refers to the ability of the organization to operate as one by working towards a common shared vision supported by a well orchestrated set of strategies and actions. Agility refers to the ability of the organization to respond to and manage change. Assurance refers to the ability of the organization to establish and institutionalize (internalize) practices that ensure fulfillment of organizational goals and achievement of outcomes.

We often need to present measures that show EAs impact. This can be related to cost avoidance, risk mitigation, and much more, so a traditional business case is often difficult to establish. But you really only need one or two early 'successes' that demonstrates EAs value to the enterprise to get initial buy-in. However, the more successful EA becomes in adding value to the enterprise, the more invisible it becomes; we can call it EA by stealth, and that's the situation where EA is done 'everywhere' in the enterprise.

In my view, all kinds of organizations can benefit from EA. The degree of relevancy of EA in a given enterprise depends on a number of factors. Many find it useful to work with the concept of operating model as introduced by Ross, Weill and Robertson: The four fundamental business models determined by the combination of high or low business process standardization and integra-

tion (i.e. Coordination, Diversification, Unification, Replication). Each operating model captures a particular set of process design principles. Identifying an operating model is a necessary first step in building a foundation for execution, and is a feature of successful companies. Unification is in many ways for the most EA savvy, and will require a high level of architecture maturity.

Real-World EA

In the real world, many enterprises have many different operating models in their various lines of business or segments, and then sometimes also just because they're an incoherent mess. Both ends of this 'scale' can benefit from EA, but probably in different ways.

One common criterion I sometimes use is enterprisingness, the degree of 'enterprise', in the meaning readiness to embark on bold new ventures. As an enterprise. We know that EA is especially helpful in highly complex and dynamic environments, and have seen its benefits in, for example, M&A situations. EA is a good approach to counteract short-termism and yet to deliver immediate results, such as crucial prioritizations and essential impact analyses.

The quick-wins can be plenty, but will depend on how EA is approached and what is done in the initial phases. However, if EA is done *blindly* 'by the book', e.g., as prescribed in TOGAF's ADM, chances are that there will be few quick-wins; rather, you should start out by understanding the context of the enterprise you implement EA in, and then identify some strategic and tactical initiatives where EA could help, and where there will be a clear business case for the initiative.

So, look at the enterprise's major burning platforms, the in-your-face-as-you-walk-in-the-door as-is situation, and how the enterprise's self-awareness about the as-is is. Sometimes, actually oftentimes, a simple maturity assessment and some good communication about this can have a huge impact in terms of getting acceptance and buy-in to initiatives. In many cases, getting buy-in for an initiative can itself be regarded as a quick-win of the EA, because before the EA, the sponsor couldn't get buy-in.

Next Generation EA

Some analysts out there are coming with drastic predictions about EA program closures, but this is not really what I see. Of course, some EA programs are shut down, but more often, they are reshuffled and reorganized, and quite often, this is perhaps not such a bad idea after all ...

Unfortunately, the EA profession is mired in a technology paradigm that grossly undersells its capability to bring coherence to the entire business. Infosys recently published a Survey in which the major finding is that "Alignment of business and IT organization is the #1 objective of enterprise archi-

ecture ...” That is certainly goodness, but how about assuring the all parts of the business are aligned with each other? How about ensuring all the oars are pulling together? According to the same survey some business-oriented indicators are starting to gain traction. So do I, actually in more and more places, and today's agenda is more the '*beyond* business-IT alignment' than anything else.

I think that EA is crucial to transforming enterprises, because it is essential for an enterprise to have an integrated and coherent approach to its strategies, business and technologies, and that is exactly what EA is all about. EA is often considered a transformational effort dealing with change, but as laudable that might be, this in fact falls well short of EA's full potential. If we only ever do EA as part of a transformation project, how can EA ever tell us what transformation to make? Therefore, EA must become pervasive and regularized, and continuously be tied to ongoing strategic planning and corporate governance.

EA is a way to enable that created policies are implementable and in fact implemented; that policy programs can meet their targets and create the outcomes they aim at; and of course also, that the ongoing e-transformations (e-business, e-gov, e-health, ...,e-*) are more successful.