

Enterprise Architecture Driving Business Innovation



Time to Break EA Out of IT

By Chris Potts

The potential for Enterprise Architecture (EA) to drive business innovation is immense, but will remain largely untapped while EA remains centred on Information Technology (IT). To realise its true value, EA now has to break out of the domain of its birth. Thankfully, the chief enterprise architect is already out there, not working in IT and never has. Our challenge is to become part of their team.

Innovation

Innovation – the successful exploitation of new ideasⁱ - makes a vital contribution to the value an organisation creates, and to economic growth. According to my Pocket Economist, and indeed much of the business press, the big challenge is for firms and governments is to make innovation happen more often.ⁱⁱ

From an EA perspective, familiarity with the basics of economics is vital since they remind us that 'enterprise' is one of the four Factors of Production from which an organisation can create value. Enterprise is the spirit that brings together and mixes the other factors (land, labour and capital), to take risks and produce something valuable. In this context, processes and technologies are elements of capital, not enterprise. I've always found that architecting 'enterprise' as defined by economists has a greater impact on innovation and value creation than architecting 'an enterprise', typically meaning its capital, land and labour.

Each Chief Executive Officer (CEO), as enterprise leader, knows the extent to which innovation is vital to the corporate strategy, and many are actively fostering it in their people and culture. He or she will equally be aware that too much innovation, or the wrong sort, can be as damaging to a corporate strategy as too little.

I remember seeing the CEO of a major UK company brief stock market analysts on his corporate strategy, and that innovation was a key plank of that strategy. The feedback was mainly positive, but also cautious. The company was seen as a 'safe' investment, delivering steady returns from a well-run business. Too much innovation, which is inherently risky, might not be a good thing.

CEOs have two sets of tactics to make innovation happen: structural and cultural. The structural tactics include appointing formal innovation leaders, ring-fencing investment in Research and Development, having an 'innovation funnel' process to choose which innovation ideas to invest in

and exploit, and measurement of the extent to which the organisation is innovating successfully. Companies that innovate for a living, such as pharmaceuticals, demonstrate these structural characteristics for the rest of us to emulate. Cultural tactics include developing strategic conversations about innovation, reversing the thrust of the investment process so as to cause people to optioneer potential investments rather than settle on one solution and justify it, encouraging people's 'Free Child' (a term from Transactional Analysisⁱⁱⁱ) and accepting a certain craziness, and fostering collaboration.

The Contribution of Enterprise Architecture

Contributing to business innovation is EA's primary motivation: to make sure the organisation is exploiting new ideas, so as to protect and grow the value being created. This is not, however, the focus of every Enterprise Architect. Some concentrate more on policing the ideas that become projects, to make sure they fit with an agreed blueprint, roadmap or set of standards. That is undoubtedly a useful thing to do, but is at a later stage in the investment process, more concerned with capital than enterprise and at a different level than the 'big picture' EA that this article explores.

EA's unique contribution to business innovation is its combination of 'big picture' perspective and investment pragmatism. EA surveys the whole enterprise landscape, while others see one area of it, pinpointing opportunities to exploit ideas and create the value promised by the corporate strategy. Then it influences people to explore and validate these ideas, invest in them and exploit what they produce.

Contrary to the common belief about EA, there is no inherent IT-centricity to this contribution and the innovations it generates. Indeed, an IT-centric view of the world is a major constraint, sometimes terminal, on EA's potential contribution. To successfully influence business innovations, it's vital to take an enterprise-centric view, remembering that technology is just one category of capital. Rather than being IT-centric, effective EA is IT-ambivalent: some innovations will involve IT, some won't. The presence or absence of IT is not the defining factor.

This IT-centric (or, more generically, capital-centric), perspective of EA is very pervasive and helps to explain why the discipline is struggling to make a difference to value creation in 70% of organisations^{iv}. EA has itself usually been the cause of this distorted perspective, by making technology its visible launching-point. For example, in the early days of an EA programme, technology standardisation may be a low-hanging fruit for EA to demonstrate its big-picture perspective and influence over investments.

The main dangers with this tactic are threefold: that EA immediately gets put in the IT 'box' and will then struggle to break free, especially if its next wave of tactics is IT-centric too; that this is architecting capital, not enterprise; and that the benefits of technology standardisation are in destroying less value, through future cost savings, rather than directly creating more. EA paints itself as a technology-centric, cost-saving competency rather than enterprise-centric and value-creating. A greenfield EA programme does better to steer well clear of technology, finding opportunities to architect enterprise to create new value and in which IT plays no significant part.

In their 2006 book “Enterprise Architecture as Strategy”¹, Ross, Weill and Robertson make the argument for EA’s extraordinary contribution to corporate and business strategies, only to fall again into the IT- and capital-centric trap. They assert that a company’s ‘foundation for execution’ is the IT infrastructure and digitized business processes automating a company’s core capabilities, and that the fourth and final stage of EA maturity is confined to managing and reusing loosely coupled IT-enabled business process components.

Many a CEO (and Chief Information Officer, for that matter) will tell us that the foundations for executing strategy, and equally its primary constraints, are people and money, not technologies and processes. It is people who decide what these technologies and processes are, then deploy and exploit them, and money that pays for them.

The Enterprise Big Picture

EA’s contribution to strategy and innovation – the ‘big picture pragmatism’ characterised above, marries the enterprise landscape with its investments in change. The capital landscape (including processes, systems and technologies) can be valuable knowledge but is neither the ‘magic ingredient’ of EA nor its ultimate objective. The enterprise landscape is about how elements of the capital landscape are chosen, invested in and deployed in the first place, and how people use them to create value. Borrowing from the subtitle of Jonas Ridderstråle’s and Kjell Nordström’s 1999 book “Funky Business”², the enterprise landscape is the talent that makes the capital landscape dance.

Enterprise Architects can subdivide and model the big-picture enterprise landscape, and the corresponding capital landscape, in different ways. We should always start, however, with the market environments in which the organisation is operating. Markets value enterprise – or not. We leave the markets off our EA big picture at our peril. They are the context for architecting our enterprise, and EA has the power to reshape them through innovation.

Architecting enterprise to reshape markets is what entrepreneurs have always done. They have understood and influenced what people value, spotted a discontinuity and changed the way a market works in their favour. For example, air travel. Entrepreneurs such as Stelios Haji-Ioannou, the founder of Easyjet, invited us to value the air travel proposition differently and thus reshaped that market. Established airlines have been forced to change their business models, and if they offer an alternative proposition from the likes of Easyjet to positively differentiate it in the eyes of customers and investors. In some other markets a similar philosophy has not been so visibly successful, illustrating that a successful innovation in one environment does not necessarily have the same impact in another.

The following model simply articulates this first principle: that EA starts with the markets and builds inwards. It is also distinct from some other EA frameworks because it models enterprise as nested layers, rather than as separate rows or columns.

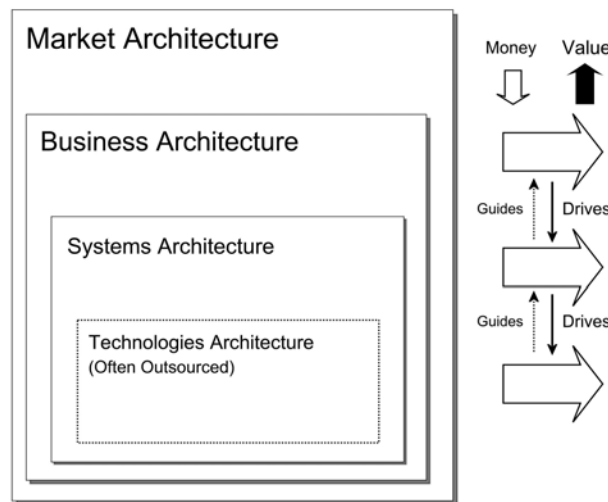


Figure 1: EA Market-Driven Framework

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The model illustrated in Figure 1 provides the basis for adding detail about the enterprise, its capital, labour and land, without losing the two driving principles on which the model is founded: EA starts with the markets and builds inwards; and its layers are nested. Frameworks such as this offers EA some knowledge capital of its own, but as yet no influence over innovation and value creation. Architecture, but no enterprise.

EA's influence over people's investments in business change is the other half of the equation. The talent that makes our EA capital dance is the ability to shape other people's ideas in ways that would otherwise be lost, and to help them exploit those ideas through their investments in change.

Figure 2 illustrates where in the organisation's investment process EA must have the most influence, before other competencies take over and use their own capital to turn the innovation ideas into investments that create value. The Enterprise Architect's modus operandi is to find, collaborate with and influence other people working in the very earliest 'pre-conception' stage of the investment process, essentially shaping ideas before they happen:

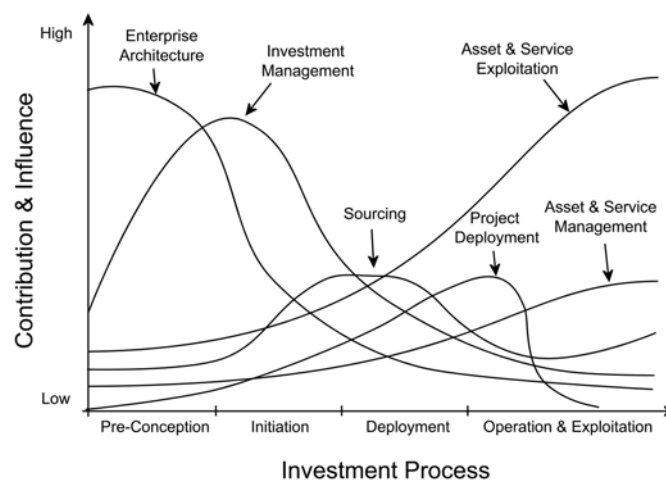


Figure 2: EA and the Investment Process

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Breaking EA out of IT

EA has built a perception that is IT-centric, and continues to reinforce it. Most officially-titled Enterprise Architects work in the IT department and for IT-associated suppliers. Where the reach of EA has extended beyond technologies to embrace processes and knowledge this helps to widen its potential influence, but not by very much if it remains primarily concerned with infrastructure and IT-enabled processes. More deeply, as I have argued above, processes, knowledge, technologies and infrastructure are all elements of capital, not enterprise.

However, whether we are focused on enterprise or capital, the organisation's chief architects of these things do not reside in IT. They do not have an IT-centric focus, nor use formalised EA frameworks and are not called 'Architect'. Typically, our chief enterprise architect is the CEO, and our chief capital architect is the Chief Financial Officer (CFO). At the executive level, EA does not need breaking out of IT as it has never been there in the first place. The Enterprise Architects' challenge is to connect with, contribute to and influence the strategy of our chief enterprise architect, the CEO, while making sure the CFO sees the value of our capital.

The root cause of IT-centricity in formalised EA might be considered organisational, because the people with Enterprise Architects job titles are usually sited in IT. In truth that is just a symptom of the underlying issue. We have been primarily been architecting capital, not enterprise and moving us to a different part of the organisation may not change that. Conversely we can shift our personal focus to architecting enterprise, working in IT or not, although we may then find ourselves out of tune with others in IT who are focused on building and managing capital. If so, and if we are by then more obviously in tune with other 'enterprise architects' outside of the IT department, then that may be the time to change reporting lines.

It is an enterprise-centric mindset that that will get us into the CEO's 'EA team', exploiting our EA capital to drive business innovation and create value. To articulate this another way, we need to move our EA focus from 'what' to 'why', shifting EA from a capital-centric to an enterprise-centric discipline. We should make John Zachman's column six (Why) into our column zero, put it before column one (What)^{vii} and see where that takes us. It may be time for some innovation and enterprise of our own.

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ⁱ UK Government definition. (2007) Source: www.dti.gov.uk

ⁱⁱ Bishop, M. (2000). *Pocket Economist*. Profile Books Limited.

ⁱⁱⁱ Berne, E. (1964). *Games People Play*. Penguin Books.

^{iv} Paras, G (2007). EA Update: Convergence or Divergence? *Enterprise Architectures Conference*, Las Vegas, NV

^v Ross, J.W., Weill, P and Robertson, D.C. (2006) *Enterprise Architecture as Strategy*, Harvard Business School Press

^{vi} Ridderstråle, J., Nordström, K. (1999) *Funky Business*, Bookhouse Publishing.

^{vii} Zachman Framework for Enterprise Architecture © John A. Zachman