

Enterprise Architecture: A Snapshot from Practice

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ABSTRACT

Enterprise Architecture (EA) has been portrayed as one of the cornerstones of modern IT Governance, with increasing numbers of organisations formally recognising an EA function and adopting EA frameworks such as TOGAF (<http://www.opengroup.org/togaf/>) (The Open Group Architectural Framework). Many claims have been made of the benefits of EA, yet little is known as to what organisations actually do or evidence of the benefits they accrue through EA. In this paper we report on the results of a small scale survey painting a snapshot of current EA practice in large UK organisations across the private and public sectors.

Keywords: Enterprise Architecture (EA), IT Governance, Organisations, Snapshot, The Open Group Architectural Framework (TOGAF)

1. INTRODUCTION

The discipline of Enterprise Architecture (EA) (Bernus & Nemes, 1996; Ross et al., 2006) has grown over the past twenty years to become a notable part of IT Governance, the latter described by Calder (2009) as a “framework for the leadership, organisational structures and business processes, standards and compliance to these standards, which ensure that the organisation’s IT supports and enables the achievement of its strategies and objectives.” EA is often portrayed at the intersection of an organisation’s IT strategy and business strategy, with its effectiveness depending upon the specification of an IT architecture able to support adequately

the organisation’s business model (Winter & Schelp, 2008). Indeed, many claims have been made of the benefits of EA, accruing from its holistic view of the organisation, including the ability to: support business processes and deliver organisational change effectively and efficiently (Schelp & Aier, 2009), simplify and future-proof the IT infrastructure (Ross et al., 2006), optimise procurement and outsourcing, better decision making (Van den Berg, 2006), and deliver organisational change more quickly and cheaply (Aier, 2004).

Of course, business models can vary significantly and are contingent upon many factors, including organisational culture, customer type (consumer or business), product or

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service variety on offer, tangibility of such an offer, and geographical diversity, to name but a few. However, a common belief that there are certain characteristics shared between the business models of diverse organisations has led to the development of generic EA frameworks and methodologies. In parallel, technical innovations in the nature of software development, such as Service Oriented Architecture (SOA), have enabled practical implementation of some of the key theoretical benefits of EA, such as cost savings in software development through re-use of existing software. This has allowed a closer association of business processes with discrete pieces of software which are specifically required to perform these processes, with EA performing a key role in realising such an association and fostering corporate agility with better adaptation of IT to changing business processes (Schelp & Aier, 2009).

EA is becoming standard practice in large organisations, often embodied as a separate and well defined function. Yet information of what individual organisations actually do and evidence of the benefits they are accruing through EA is lacking, partly because of commercial sensitivity, but also because this remains a fragmented, practitioner-led subject area, with little academic empirical work done and much of the literature aimed at a practical, self-help market (Schönherr, 2009), often relying on anecdote and supposition to support a method's effectiveness. Schönherr uses a comprehensive review of the literature between 1987 and 2008 and concludes that the large majority of published EA literature discussed theoretical approaches to EA which speculate about the areas of a business that might benefit from an EA practice. However, relatively little research has been carried out into the application and efficacy of EA as a discipline and to test the suppositions made about the EA's role in the achievement of organisational objectives.

The work in this paper is a step towards collecting evidence from practice to substantiate some of the claims made of EA. We conducted a survey within a practitioner network, with respondents from a number of (mainly

UK) large organisations from the private and public sectors. Although on a small scale, data from the survey provides a snapshot of UK EA practice, with an indication of the level of adoption of EA frameworks and approaches and perceived benefits of EA within the respondents' organisations.

The paper is structured as follow. Section 2 provides some background literature review. Section 3 gives an overview of the survey with the analysis of its data in Section 4. Section 5 discusses the results and Section 6 offers some conclusion and outlines possible future work.

2. BACKGROUND

2.1. IT Governance

There are two key facets to IT Governance. First, there is the need for a good alignment between IT and business, and greater transparency in the IT-related decision making process, so that there is real return on IT investment in delivering business value and supporting business strategic objectives. Second, there is the need for the judicious treatment of business risk, and of greater accountability and control, the latter often the result of legislation and regulation (such as the Sarbanes–Oxley Act in the US or the Data Protection Act in the UK).

The first facet is much portrayed in the work of Weill and Ross (2004), which defines IT Governance as “specifying the decision rights and accountability framework to encourage desirable behaviour in using IT.” This strategic perspective is mainly concerned with management and organisational design rather than with the operation of IT, and makes a clear distinction between the taking of individual decisions and the framework created to facilitate effectively that decision making.

The second facet is present, for instance, in Calder (2009), which portrays risk management at the core of effective IT Governance, with IT-related risk including: interruptions (whether from project failure or unplanned disruption) to business processes and customer services;

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