

Butler Group ▶
a **Datamonitor** Company



IT Strategy and Architecture

Creating an Enterprise Model to
Support IT Strategic Planning

September 2008

SECTION 1: Management Summary

► 1.1 MANAGEMENT SUMMARY

CATALYST

IT organisations are under pressure to develop an effective strategy and to deliver services that can support changing requirements. An architectural approach can offer a useful framework within which organisations can plan and execute IT strategy.

KEY FINDINGS

- There needs to be a clear understanding of the enterprise goals and the role that the business expects IT to play.
- To remain competitive, organisations must urgently address the growing dislocation between strategy and IT deliverables.
- Defining an IT strategy is of little value if organisations are unable to measure the effectiveness of that strategy in delivering value.
- Enterprise Architecture must take a leadership role in IT strategy and service delivery.
- Special attention should be paid to the people and process aspects of Enterprise Architecture.
- An enterprise model needs to be communicated in each stakeholder's 'language', as well as being relevant to senior management and solution architects.
- Architecture can benefit from a metrics-based and performance analytics-driven approach.
- For architecture to become a respected discipline there needs to be additional encouragement.
- Organisations should take a portfolio-based approach to selecting IT investments.

ANALYSIS

Introduction

The IT strategy of many organisations has evolved over a period of time rather than been purposely defined, and in many cases is not actually documented. However, businesses and customers expect IT systems and services to meet the requirements of the organisation with the consequent need for translating the organisation's objectives into IT strategy and capabilities, in order that together they can respond to the rapidly-changing environment. The adoption of an end-to-end architectural approach can help with IT strategy planning and execution.

In order to improve competitiveness, organisations must urgently address the growing dislocation between the business requirements and IT deliverables. This issue is directly impacting the enterprise's ability to make quick, accurate decisions and is causing slow implementation of the IT strategy. The gap between IT capability and business needs cannot be allowed to continue. Additionally, many organisations are struggling to highlight the value that IT is delivering to the businesses. Enterprise Architecture provides a useful framework within which organisations can address governance requirements by better planning and the ability to prove compliance, as well as providing an improved understanding of the value of technology investments.

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Business Issues

Many IT strategies are assessed and updated yearly as part of the budgeting process and Enterprise Architecture initiatives are developed as isolated, 'ivory-tower' endeavours. A better method is to adopt an iterative process, and to use the opportunity to begin to translate IT strategy into reusable deliverables through architecture. This involves the adoption of an architectural approach, rather than the use of tactical undertakings where there is a possibility of reverting back to a siloed mentality, as there is no mechanism in place to interpret strategy and control delivery through the use of architecture, policies, patterns, and common standards.

The IT strategy must address the capabilities required to design and deploy IT solutions, and the way in which the organisation will exploit these capabilities to create business value, both of which must be measured to gauge their success. The IT capabilities include technology infrastructure, business applications, IT processes and services, and skills, which enable a portfolio of IT-enabled business projects and programmes. A balanced scorecard approach provides a unified view of IT strategy performance across all of these dimensions.

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Enterprise Architecture is an important company asset that has to be managed and updated on an ongoing basis to ensure relevance is maintained. To successfully adopt Enterprise Architecture there has to be complete buy-in across the entire organisation, with an understanding of the allocation of the roles and responsibilities. Technology and business areas within the enterprise must work together to ensure that the architecture keeps in line with the strategic objectives of the company and adequately reflects the IT services available now and planned for the future.

Attempts to align IT strategy with an abstract business vision or strategy are doomed to failure, and within the Enterprise Architecture domain, an enterprise model is a way to deconstruct business strategy and objectives into

something that is more tangible, and into which the other elements of the business environment can be integrated. Butler Group recommends an incremental approach based on continuous improvement when developing an enterprise model, focused at meeting the business objectives and where value can be delivered quickly. This can be achieved by the model only depicting just enough architecture to enable decisions to be made and by growing the model iteratively over time.

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The belief is that Enterprise Architecture and engaging with senior management to define a top-level business architecture and enterprise model has become a necessity for any organisation wishing to effectively interpret IT strategy, and successfully utilise technology as an enabler for business agility and change.

Technology Issues

To provide maximum flexibility an IT strategy must be developed that is guided by Enterprise Architecture, and which is supported by a services-centric approach, and has its foundation in a common platform. This interlinked approach and use of a layered architecture shields the inherent complexity of the IT environment from users, which, as a consequence, speeds up deployment, lowers the cost of integration, and exploits existing investment in IT applications and infrastructure.

The future direction of IT delivery is moving towards shared services. Therefore, when developing an IT strategy, due consideration must be given to the methods and models likely to be deployed that enable the delivery of IT as a service. When considering how IT will be consumed in organisations the influencing factors include distribution, competence, and flexibility. The impact of these different aspects on an IT strategy focuses attention on what is delivered to whom and when. This may be a combination of different delivery mechanisms to suit the organisation's specific requirements – in other words the belief is that a one-size-fits-all approach will not be appropriate.

In particular, with the recent emergence of Service Oriented Architecture (SOA), Enterprise Architecture has a very important role to play in enabling the understanding of the horizontal-layered IT landscape. Organisations planning the deployment of SOA can identify where it makes sense and the best implementation strategy, as well as identifying any security issues around SOA operation, including assisting with the control and visibility of services.

Butler Group believes that at the heart of an end-to-end, architectural approach is a common services platform. The combination of standards-based integration, flexible business processes, unified information, composite applications, and real-time metrics into a services platform is an extremely strong proposition, enabling an evolutionary approach to linking business processes to enterprise databases, legacy systems, line-of-business applications, and external services.

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IT trends play a significant role in the architecting of any organisational infrastructure, and therefore by implication the IT strategy. In the past, trends such as the Internet, client/server, and wireless communications have all caused organisations to make step changes that created disruption for the organisation during transition. The issue with these previous trends is that many organisations did not plan to deploy the technology initially, but were forced to implement due to prevailing market conditions and the need for organisations to remain competitive.

Future trends, other than the already mentioned move to SOA, include the expectation that virtualisation will become a dominant technology in the IT environment within the next three years. In addition, the emergence of Web 2.0 and the availability of different communication mechanisms is forcing organisations to consider multiple channels for collaboration.

Market Issues

Over the last several years the awareness and adoption of specialised tools for documenting and communicating Enterprise Architecture in a centralised way has increased, driven by multiple overlapping regulatory pressures, considerations of standards-based development, and the benefits of best-practice frameworks. In many instances Enterprise Architecture was being used initially to document IT hardware and software assets and their relationships before being exploited outside the IT environment.

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There are indications that Enterprise Architecture is starting to be used as more of a strategic tool by the entire organisation. Enterprise Architecture keeps on evolving, which is reflected in a more professional approach being adopted with the use of standardised processes, frameworks, and tools, as well as an architect becoming more of an accepted discipline.

A criticism frequently levelled at models and early Enterprise Architecture programmes was the lack of interaction and deliverables that were useful to other stakeholders. This led to the development of functionality to support the integration with software, such as Business Process Management (BPM), IT Management, and Systems Engineering, along with the creation of mechanisms to import/export data into the enterprise model from other tools and databases. To be of relevance, Enterprise Architecture needs to be integrated and interact with BPM and in particular SOA initiatives, as well as other IT capabilities.

“Many architecture modelling solutions have previously failed to meet the needs of an important constituency – the senior business decision maker.”

Many architecture modelling solutions have previously failed to meet the needs of an important constituency – the senior business decision maker. Complex modelling solutions lack a way of presenting a sufficiently abstract and easy-to-change view of the enterprise, especially when it comes to the aggregation and analysis of data relating to architecture, strategy, and operations. Many decision-makers typically turn to the ubiquitous spreadsheet for such capabilities – an approach that is less than ideal, lacking as it does vital elements of control, governance, and collaboration.

Whilst organisations have benefited from establishing reference architectures, and cascading requirements and constraints to downstream activities, Enterprise Architecture, as a discipline, still lacks the data- and performance analytics-driven approach that is slowly becoming pervasive in IT. Without a fact-based assessment of each architecture option, Enterprise Architecture is prone to be guided by opinion, which can prove relatively expensive, be open to manipulation, and sometimes inefficient. The more innovative tools are now able to do comparisons using various different metrics and are developing ways of integrating real-time or near real-time operational data with the architecture, blending the models with interactive components and actions, as well as domain-specific method and content.

This Report reveals:

- How organisations can bridge the gap between strategy and deliverables.
- Why now is the time for Enterprise Architecture to take a leadership role.
- The benefits and issues of an architectural approach.
- The importance of the people and process aspects of Enterprise Architecture.
- How to plan and execute an IT strategy.
- Why the effectiveness of IT strategy should be measurable.
- How IT policy can provide support for strategy implementation.
- Examples of successful Enterprise Architecture initiatives and IT strategy documentation.

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Analysis without compromise

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