

## THE RELATIONSHIP BETWEEN IT STRATEGIC PLANNING AND ENTERPRISE ARCHITECTURAL PRACTICE

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**Abstract.** This paper reviews IT strategic planning and enterprise architectural practice, and compares these two approaches to the planning and management of the IT infrastructure within an enterprise. The paper concludes that the intent and scope of both approaches is very similar, although the detail of the processes used and the outputs differ. Both approaches could beneficially be used in a complementary fashion, which could result in a new IT planning and management paradigm.

### INTRODUCTION

The IT sector is going through a period of rapid change, and the rate of change is expected to at least maintain, if not accelerate. Most commentators regard rate of change as a key issue in the sector. The following areas are subject to rapid change:

- New technologies are emerging and old ones are superceded. Many major technologies can have a life expectancy of less than five years.
- Deregulation of the IT sector (particularly the telecommunications industry) in many nations has meant more competition and, therefore, more possible vendors or service providers to choose from.
- Costs in many areas are changing rapidly (normally in a downwards direction, but not always in a uniform nor predictable manner).
- As a result of the above, business options for the provision of IT services have increased. Leasing, contracting and outsourcing have become viable alternatives.

These pressures have resulted in a drive for new approaches to planning and managing IT services. Within the corporate world and, to a certain extent, government organisations, *IT strategic planning* became pre-eminent, especially in the early 1990s. In the latter half of the 1990s, the concept of *enterprise architectures (EA)* became prominent in the US Department of Defense; a trend which has flowed on into the US government sector and the international military community.

Some distinct similarities between the two approaches are apparent. This paper reviews these two approaches to IT planning and management and provides a comparison of them.

### IT STRATEGIC PLANNING

In discussing IT strategic planning, it is important from the outset to distinguish between *strategic information systems planning* and *strategic planning for information systems*. The former relates to the selection of systems that will give an enterprise a strategic business advantage over its competitors, such as the US Airlines computer-based Sabre reservation system of the 1960s. The latter relates to the long-range planning of all IT systems and services which the organisation will utilise, both for business and administrative applications. The latter term (strategic

planning of an enterprise's IT infrastructure) is the subject of this paper.

The Central Computer and Telecommunications Agency (CCTA<sup>1</sup>) of the UK Treasury denotes the following concerns of IT strategic planning: [1]

- understanding the aims and objectives of the business,
- establishing the information requirements of the business,
- outlining the systems to provide the information, and determining the role of technology in supporting the information systems,
- agreeing policies and plans to develop and implement the information systems,
- determining the role and use of resources to achieve the information systems required, and
- managing, reviewing and evolving the strategy.

Fundamental to the strategic planning process are the following:

- **An inventory of existing services.** These should include all IT services, including computer-based information systems, computer networks and other telecommunications services.
- **A detailed cost model of each service and a summary model for IT services as a whole.** Costs of existing systems, including capital, operating, personnel and maintenance are captured. Any trends should also be captured and monitored.

These requirements provide a baseline for all planning and decision-making activities, and are inherent in most, if not all, IT strategic planning methodologies.

The two most commonly described approaches to IT strategic planning are: the IBM-developed *Business Systems Planning (BSP)* and the *Critical Success Factors (CSF)*.

- BSP is described as "a general purpose methodology for information systems planning". [2] It revolves around a translation of a business strategic plan to an information systems strategic plan. Each element of the business strategic plan is "mapped" to a derived element of the IS strategic plan. For example, "diversify into new

<sup>1</sup> The CCTA is responsible for formulating general IT policy and detailed procedures and methodologies for all UK government departments.