Chapter 16
Strategic Planning for Information Technology:
A Collaborative Model of Information Technology Strategic Plan for the Government Sector

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ABSTRACT

Information technology (IT) is strategic for organization management, although many companies lack IT governance and planning, skilled people, defined and institutionalized methods and procedures, internal controls and indicators, and structures for agreement service levels and information security, legality, and economy. In this scenario, a minimum organization and control in the use of resources is needed to boost technical and administrative efficiency, with a focus on IT governance. An information technology strategic plan (ITSP) aims at discovering the resources and IT in an organization to direct the technological and information architecture to its strategic objectives. The Brazilian government issued a normative instruction (NI04) for public organizations to develop IT strategic plans so that they can purchase products and services. In order to help organizations develop, control, and manage their ITSPs, a model was created that defines a set of auxiliary steps in the construction of the ITSP.

INTRODUCTION

Over the years, many public and private organizations have had their areas of Information Technology undervalued, generally confined to the supporting role (Doherty, Marples & Suhaimi, 1999; Blili & Raymond, 1993).

The increasing demand for the use of Information Technology (IT), allied to the transformation of IT in strategic assets, created the need to improve the management of technology in these institutions. Typically, organizations use their technological resources on a very poor level of planning where IT decisions are taken in an isolated way, for different reasons and by different people in their structures.

Still, as a consequence of this scenario, the following situations are experienced: lack of continuity in projects due to constant change of priorities and objectives, or a need to attend to emergency situations, especially those arising from decisions by individual managers; bad design of computational and human resources for the Information Technology unit; information systems deployed without adequate regard to compliance requirements, creating more problems than solutions; lack of motivation of the professionals involved in the process, and leaders who often decide to reduce investments in technology (Chan, 2005).

Nevertheless, IT strategic planning is still placed in the background and, to reverse this, it is necessary to develop a plan that allows the combination of strategic guidelines and organizational intelligence with IT actions (Burn & Szeto, 2000).

There are several ITSP development models, including the one proposed by Microsoft (Microsoft, 2011), named Microsoft Methodology Consulting Service (MCS) which is based on the technical recommendations of COBIT, and developed jointly with partners who specialize in this practice. This model is divided into five stages where each stage has activities related to its responsibility. The first stage deals with the generation of the IT strategic plan, the second includes a survey of IT needs, the third one maps the desired situation, the fourth prepares the strategic IT plan, and the fifth one is for ITSP implementation and monitoring.

The model proposed by some authors considers three steps in ITSP development. The first one is preparation, generated throughout the framework to create a ITSP, the second step diagnoses the current situation, where the body has an exact notion of the stage, and the needs are raised. The final step is to plan the situation whose attainment is planned, at which point the ITSP is produced (Hazan, 2010; Fagundes, 2011; Cruz, 2009; Rezende, 2003).

The Brazilian Planning, Budget and Management Department (BPBMD) issued a Normative Instruction (NI04) stating that IT acquisitions (Products and Services) should be preceded by an ITSP (Normative Instruction 04, 2008).

The ITSP provides a full view of the current environment and of Information Technology, according to current and future needs, and allows direct information architecture and technology aligned with the strategic objectives of the institution (Weill, Ross & Robertson, 2006).

The ITSP consists primarily of the knowledge of its resources (services, business processes, information systems, infrastructure, and technology) from an analysis based on the purpose of the organization, definition and planning of a strategy for IT growth. An administration concerned with ITSP is a company that uses modern principles of rationality, consistency and quality, creating a policy for success.

The IT strategic plan must reflect business needs. Therefore, aligning the IT strategy with the business plan is essential to helping the business achieve its goals through IT solutions. Before defining initiatives and projects, you must determine what the business needs are. A scan of available technologies will identify possible solutions for business requirements. Once you've identified the business elements, IT

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