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THE INFORMATION ARCHITECTURE POSITIONING IN IT GOVERNANCE

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ABSTRACT

IT governance is supported by various models and standards such as COBIT, ITIL, ISO 20000 and ISO 27002. The main objective of these models and standards is to give transparency to the actions and processes of IT. In a short study of each them, we observed that they do not present in your body space for the information architecture. If one of the goals of the Information Architecture is to organize the information for decision making, how can this be out of context? This research aims to study the IT governance models in order to prepare a modification suggestion to place the information architecture in each one of them.

Keywords: Governance; Information Architecture; Best Practice; Information Technology (IT).

1 INTRODUCTION

Much has been said about ‘best practices’ of governance and the benefits of its adoption in the corporate context and the management of technological resources. The necessity of align actions with strategic goals is present in most of texts about this theme.

More than the result of the society reaction to the waywardness and accounting and financial fraud developments in the last decade with major

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international companies, governance is a natural evolution of society toward greater control, transparency and responsibility in the conduction of business. Organization governance means the ability of its leaders to effectively implement the principles, guidelines and controls that ensure, consistently and predictably, the attention to its corporate purpose and legal obligations.

Corporate Governance was defined by *Instituto Brasileiro de Governança Corporativa* (IBGC) as "[…] the system by which companies are directed and monitored, involving the relationship between shareholders, administrative council, board of directors and audit committee" (IBGC, 2005).

Only IT resources with their computers, databases, systems and telecommunications, are able to field the information complexity and mass involved in their activities to ensure the necessary controls to the corporate governance.

Information technology offers unique challenges for its own governance. Demands for better understanding and visibility of their internal processes, full alignment with business objectives and economic operation of its infrastructure are some examples. Good IT governance is an essential requirement to ensure the effective contribution of IT to the profitability of the company and to consolidate its strategic positioning for the future.

In this context, the IT Governance Institute (2005) defines IT governance as follows:

> IT governance is the responsibility of senior management (including directors and executives), leadership, organizational structures and processes that ensure IT sustains and extends the strategies of the company and the goals of the organization."

To Weil and Ross (2004) IT governance consists of a tool for specifying the decision rights and responsibilities, to encourage desirable behavior in using IT. According to these authors, it is an integral part of corporate governance and indicates what should be done to make right decisions, and who are the people that make such decisions about how much and how the organization invests in IT.

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According to Fernandes and Abreu (2008) the main goal of IT governance is to align IT resources with business requirements, based on business continuity, care of business strategies and service to external regulatory frameworks.

In order to cope with these challenges some models, methodologies, standards and tools have been developed (by professional associations or encouraged by governments) to make the management of IT and work processes more transparent, understandable, manageable and reliable. *Control Objectives for Information and Related Technology* (CoBIT), *Information Technology Infrastructure Library* (ITIL), Capability Maturity Model Integrated (CMMI), ISO 20000, ISO 27002 are some of these initiatives that serve as role models for the IT areas to ensure alignment of their processes to goals of the business and its own governance requirements.

2 INFORMATION ARCHITECTURE

Wurman (1995) suggests that "[…] information structures influence the interactions in the world the same way that the structures of buildings stimulate or limit social interactions". He writes that structures should be created or planning information to meet the personal paths to knowledge. Technology is an aspect to be considered by the information architecture to enable the aggregation and provision of necessary information in an organization (WURMAN, 1995).

To Hagedorn (2009) information architecture is the art and science of organizing information to satisfy information needs, which involves the processes of research, analysis, design and implementation.

In their work ‘ecology of information’, Davenport and Prusak (1998) define information architecture as a guide to design and locate information within an organization, and it can be descriptive (involving a map of the information environment at present) or deterministic (offering a model of the environment at some future time).

Rosenfeld and Morville (1998) define information architecture as:

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> 'Information Architecture' is the methodology of 'draw' that applies to any 'information environment', this being understood as a space located in a 'context', comprising 'contents' in flow, which serves to a community of ‘ users'.

According to McGee and Prusak (1994) the goal of an information architecture is to create a comprehensive map of organizational data and then build systems based on this map. The model of information architecture of authors also provides:

- Identify needs and requirements of information: on the planning of what should be done, must be obtained sources of information relevant to the institution;
- Sorting, storage, processing and presenting information: when the information should be organized and then displayed by the institution;
- Develop products and information services: the choices of resources to facilitate the location and access information Users and other stakeholders in the success of AI, as professionals and experts of the institution, can contribute to the development of products;
- Distributing and disseminating information: a process that identifies the needs of the users to meet them even before they are expressed, through upgrades, additional services such as the use of search engines, etc.

3 THE PROBLEM

So how is it possible to talk about the use of IT resources aligned to strategic planning without an appropriate Information Architecture? How to make effective use of IT resources without thinking first in an Information Architecture?

A preliminary analysis of the main models of IT governance and related international standards (e.g.: COBIT, ITIL, ISO 20000, ISO 27001, ISO 27002) demonstrate that they were not constructed in compliance with the concepts of Information Architecture mentioned previously.

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So what the positioning of the information architecture in models of IT governance and its related international standards? How the information architecture can help to ensure that they facilitate the organization of information for companies achieve their strategic goals?

4 THE PROPOSAL

This research pretends to study the IT governance models and related international standards and propose adjustments in making possible to them to include the concepts of Information Architecture.

To achieve this goal, we intend to perform a review of the Information Architecture literature trying to their possible contributions to IT governance, study models of IT governance and related international standards in order to identify opportunities for improvement.

The expected for this research is an elaboration of a proposed adjustment in the models of IT governance and related international standards by inserting the contributions of Information Architecture.

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