NEW DIRECTIONS FOR IT GOVERNANCE IN THE BRAZILIAN GOVERNMENT

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Abstract: This paper presents an IT Governance Framework and a Competency Model that are being developed to identify the intellectual capital and the strategic actions needed to implement an efficient IT Governance program in the Brazilian Government. This work in progress is driven by the premise that the human assets of an organization should adhere to a set of core competencies in order to correctly prioritize and achieve business results that, regarding government issues, relates to public resources administration. It is now widely accepted that IT Governance may help the organization to succeed in its business domain; consequently, through effective investment policies and correct IT decisions the organization can align business needs with IT resources, achieving highly integrated business services.

1 INTRODUCTION

Research conducted in recent years have shown that to efficiently apply IT resources in a well designed and responsible fashion it is necessary to implement an IT Governance program that targets organization strategic priorities. As for government organizations, most of this paradigm applies; however we must consider specific characteristics, such as rigid functional structures, political interests and the ethical use of public resources.

In many countries, the Government economy share might get to 30% (Weill and Ross, 2004). The Brazilian economy is not different and with massive investments in all economic sectors, how does one establish an efficient IT infra-structure that must be pervasive to every Government sector in order to avoid effort and public resources waste? And mostly, how can IT become a strategic asset for the Brazilian Government, helping with the investment process, and consequently improving the quality of its services? The pursuit of this new vision is orchestrated in the following sections, in which we present what has been done so far, and what is still under research.

2 MOTIVATIONS

We have achieved a new era of competition. Organizations can no longer afford to delegate IT decisions to IT officers. What we see now is an increasing need for business integration, and such integration can only be achieved through strategic business alignment with IT services.

Considering Government organizations, extreme care should be exercised when using public resources to sponsor public programs. Therefore, how can governments invest public resources in order to obtain the best results for the taxpayer? IT assets not only contribute to Government actions, but also help coordinate better ways of attending to the needs of the country, whether by means of new services or through the improvement of old ones.

Seeking that efficiency, the Brazilian Planning Ministry (MP, 2007), in conjunction with the Defence Ministry (MD, 2007) and the Federal University of Rio de Janeiro, strived to create IT Governance directives in order to standardize business and customer needs. By business we mean every public service (public value), from tax collection activities to health care services.

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3 UNDERSTANDING GOVERNMENT SCENARIO

The intensive and extensive use of Information Technology in public administration is affecting, on a daily basis, Government actions aimed at its citizens. The successive growth in tax collection and new economies brought up by electronic Government programs, are examples of the pervasive application of IT resources (MP, 2007).

Despite the increasing rate in which, nowadays, IT services contribute to governmental actions, IT elements have not always been considered as an essential and strategic asset. What we have seen was dependence, in most of the public organizations, of private organizations. And, as a sub-product of this line of action, outsourcing has become a common practice of corrupt politicians to defraud the Brazilian Government.

By not understanding that IT services were no longer fit for outsourcing (or at least the strategic services), without risking missing Government goals and incurring into quality depreciation, the impacts were crippling the Government IT infrastructure. Decisions were taken with little concern for proper impact analysis and, most of the time, using criteria that were aligned with political interest and as a function of the cost and speed in which the actions resulted for the group in charge. Governance arrangements were typically feudalistic, and all IT principles lacked proper definition and integration.

This old vision was critical to promote a shift on the way in which IT assets were managed. The new approach should be directed to Government areas that were highly dependent on IT services and the output of this new course of action should be a series of official statements that should incorporate new directions for sustaining the necessary organizational changes (MP, 2007). New perspectives meant that new solutions, either by the adoption of new policies or with the implementation of new management models, should be defined to improve IT governance inside Government organizations. Organizations that managed to succeed, despite the chaotic scenario, must be taken as examples of successful initiatives (Receita Federal, 2007), (SERPRO, 2007), and (TCU, 2007).

4 THE FRAMEWORK

Elaborating and implementing an appropriate IT Governance program is not an easy task. It is necessary to understand several organization aspects such as Government vision; mission; business strategies; goals; functional structure; human assets and, along the process, to evaluate the level of maturity attained by the organization. Having identified the organization's current status, it is necessary to plan all the steps needed to improve the IT Governance structure, its implementing and managing (Grembergen, 2004).

The framework defined below tries to align aspects oriented by business goals and IT goals without ignoring public administration aspects such as political views, responsible investments, and the population best interests and ethics.

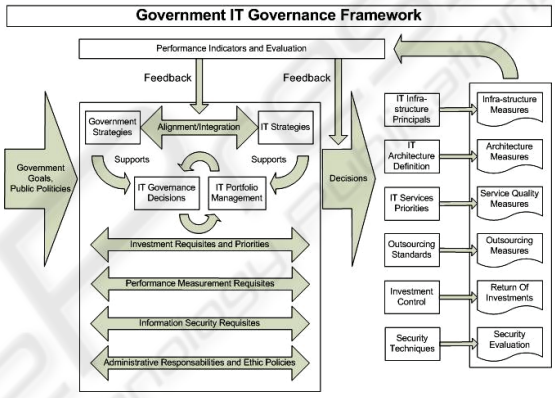

Figure 1: The Government IT Governance Framework was specifically designed, by this study, to accommodate actual needs and constraints identified in the Brazilian IT Organizations. Its elements, however, were extracted and adapted from (Weill and Ross, 2004) and (Fernandes and Abreu, 2006).

The IT Governance Framework initially states that, all goals and policies should be carefully understood in order to plan Government strategy; by doing this, IT strategies may be defined in order to provide ways to align, integrate and service Government strategies; along this process, performance measurement programs should be planed aiming evaluating levels of alignment, integration and service quality, so investments are not wasted in futile efforts. Also, administration responsibility and ethics should be employed to avoid waste of public resources, and corruption, which is a serious problem in the practice of many Brazilian politicians.

Outputs from the framework are rules and principle definitions to all IT aspects, from infrastructure, architecture and services, to outsourcing standards and performance indicators. This approach allows a specific design for each organization, meaning that each organization will

have their organization culture preserved as long as it does not influence the outputs. The final phase is to put into practice the IT-Business alignment and integration program designed for it.

Finally, an iterative process of performance evaluation is conducted to guarantee that the proposed framework and competency dimensions will converge to an efficient IT Governance Model.

5 COMPETENCY DIMENSIONS

In general, individual and organizational knowledge are the main aspects that should be considered when analyzing intellectual capital, and it is important to know that knowledge transfer activities should be planned in order to create effective learning processes. Through these learning processes, organizations create background to develop new leaders and, consequently, improve intellectual capital (Leibowitz, 2000).

In practice, accurately choosing and implementing the best governance model, requires, from the high administration and particularly top IT managers (CIOs), a great diversity of knowledge elements and skills. In the creation of a systematic vision of such characteristics we proposed a general competency domain that groups different competency aspects needed to implement IT Governance programs, as shown below.

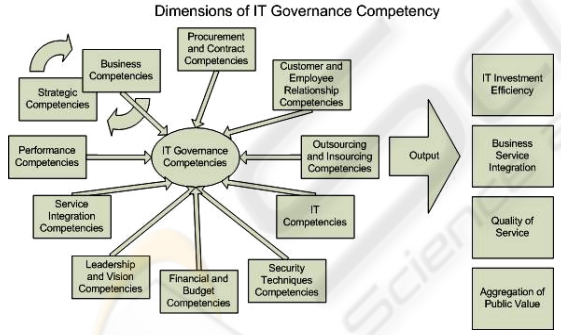

Figure 2: Dimensions of IT Governance Competency, adapted from (Weill and Ross, 2004), (PMI, 2001), (Schubert, 2004) and (ISO/IEC 17799, 2005).

We then describe each and every competency aspect that was added to the competency domain model in order to establish a general Government Knowledge Base which all IT Governance programs might use as base standard.

1. Business and Strategic Competencies. Business and Strategic competencies are pivotal elements for a successful IT Governance program. This competency domain falls outside classic technical skills and leverage the ability to acquire and administer organizations needs through IT services (Schubert, 2004).

2. Customer and Employee Relationship Competencies. Government must recruit and retain employees who are capable of coping with their daily job with responsibility and quality. It is important to form a workforce of the right competency and size, in order to achieve Government goals and offer efficient services for its population.

3. Outsourcing and In-sourcing Competencies. Governments tend to contract external services to comply with business demands, but they should also know when to "bring it home". It is important to know that outsourcing is a strategic decision that affects the organization budget, goals and structure. Extreme caution should be applied not only to know when to outsource but also to what should be outsourced and why.

4. IT or Technical Competencies. This competency domain involves IT aspects, such as infrastructure, architectures, patterns, maturity models, and programming standardizations (Schubert, 2004).

5. Service Integration Competencies. This competency domain requires strategies to model business and IT services together, so that they might be able to assist business needs in an efficient manner (Peterson, 2004).

6. Performance Competencies. Requires knowledge and skills to analyze and measure whether the aspects presented in the Governance Framework are complying with business needs and public expectations.

7. Procurement and Contract Competencies. Despite some people advocating that this competency falls outside IT Governance aspects, we decided to include it in our Competency Domain because a Government environment will always have needs related to technical aspects, such as equipment, and, therefore IT officers should be capable of managing service and supply contracts (Schubert, 2004).

8. Security Techniques Competencies. Defining, achieving, maintaining, and improving information security may be essential to maintain competitive advantage, cash flow, profitability, legal compliance, and commercial image (ISO/IEC 17799, 2005).

9. Financial and Budget Competencies. Government interests in financial and budget management are vital for political base stability. Managing budgetary processes, including preparing and justifying a budget and operating a budget under strict rules imposes a level of expertise that should be more efficient than those applied in private organizations.

10. Leadership and Vision Competencies. For public organizations, besides having technical competencies, a leader must show direction, must understand and be capable of explaining the organization's vision, must have integrity, optimism, ethics and responsibility towards the population (Warren, 2001).

This competency domain is a general overview of the elements that compose the IT Governance Program. According to our research, these levels of competency are necessary to leverage IT Governance in Brazilian Government organizations. This approach will be used by the Planning Ministry as baseline guidance to conduct future implementations of IT Governance programs.

6 CONCLUSIONS

This paper presented the competency domain model and the IT Governance framework created to align all IT and Business goals of Brazilian Government organizations. After studying the IT assets and policies of current organizations we proposed a governance standard that, according to the Brazilian Planning Ministry, should be considered as a baseline implementation.

Our contribution is only a small step towards a much broader restructuring of IT services in Brazilian public organizations.

Besides refinements of competency domain and IT Governance framework, future work also involves optimization of internal processes, identification of new competency domains, evaluation of change impacts in every targeted organization, and development of supporting tools.

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New Directions for IT Governance in the Brazilian Government.

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