



## A GLOBAL APPROCH OF IT GOVERNANCE

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(Received on: 26-07-11; Accepted on: 07-08-11)

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### ABSTRACT

*The continuous development of the new IT technologies was followed up by a rapid integration of them at the organization level. The management of the organizations face a new challenge: structural redefinition of the IT component in order to create plus value and to minimize IT risks through an efficient management of all IT resources of the organization. These changes have had a great impact on the governance of the IT component. The paper gives a global approach of IT governance. It tries also to prove that the management of IT activities in a company is not only a problem of the IT department, but one of the top management.*

**Keywords:** Corporate governance, IT governance, SOX, The Basel II, COBIT, ITIL

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### 1. INTRODUCTION

In December 2001, the Enron bankruptcy and the malpractice of its leaders changed the world economy (bankruptcy evaluated to 64 million dollars, equivalent to the annual budget spent by China in its defense). Other equally high-profile bankruptcies and equally deceptive: Global Crossing (bankruptcy evaluated to 30.2 billion USD), Conseco (bankruptcy evaluated to 30.2 billion USD), Adelphia (bankruptcy valued to 61 billion USD) and finally WorldCom (103.9 billion U.S. dollars). Only those companies had caused the loss of over \$ 210 billion, a sum that should be compared with the cost of the 11 Sept. attacks, which is estimated to 27.2 billion dollars.

After the unveiling of the fraudulent practices of these companies and dealing with what was taking the shape of a major crisis of confidence that the American, global political and leaders aim to update the governance concepts - already confused with government since antiquity, and especially corporate governance.

### 2. IT GOVERNANCE CONCEPTUEL FRAME WORK

The Significant literatures in governance area reveal that government processes can be lined up in three groups: Enterprise Governance, Corporate Governance, and IT Governance.

**Enterprise Governance** has been described as “the set of responsibilities and practices exercised by the Board and executive management with the goal of providing strategic direction, ensuring that objectives are achieved, ascertaining that risks are managed appropriately and verifying that the enterprise’s resources are used responsibly”

**Corporate Governance** has been defined as “the ethical corporate behavior by directors or others charged with governance in the creation and preservation of wealth of all stakeholders” ([12]). The Australian Stock Exchange Corporate Governance Council considers corporate governance to be "the systems by which companies are directed and managed. It influences how the objectives of the company are set and achieved, how risk is monitored and assessed, and how performance is optimized".

**IT Governance** has been defined by the ITGI “IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategy and objectives”.

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### **3. CORPORATE GOVERNANCE**

The corporate governance stems directly from the fundamental principles of governance. It also consists of three distinct classes of governance. Each class corresponding to the basics of business: capital, human resources and information.

This corporate governance consists of all the practices and organizational rules, behavior and transparency to ensure, in the goal of protecting the shareholder, the balance between the management and the control of company to the highest level, while respecting the decision-making power and efficiency of management. It also provides the structure through which defined the objectives of the company, and the means of attaining those objectives and monitor results.

According to the ITGI, the corporate governance of a public or private organization aims to provide strategic direction, ensuring that the objectives have been reached, the risks are properly managed and resources are used in a responsible spirit. The corporate governance must ensure maximum satisfaction for shareholders, customer, employees and the compliance (SOX, Basel II...)

### **4. INTERNATIONAL LAWS**

The "Basel II" accord is an update of the 1998 agreement, adopted by more than 100 countries. His rules define the methods by which financial institutions can measure their risks. Measured risks form the basis for calculating the amount of capital that the institution must set aside to cover potential losses. The fund reserves are blocked and can not be used to generate income. It aims to improve the safety and soundness of the banking system by balancing equity and potential risks using means of monitoring depth (internal control) and a greater market discipline.

The Sarbanes Oxley Act aims to ensure the accuracy and accessibility of information, the managerial accountability and the independence of auditors. This law aims to increase corporate responsibility and better protect investors to restore confidence in the market. It requires listed companies to establish a traceability system of management and therefore a good system of internal control.

These laws are the foundation of primitive concept of the IT governance that can be summarized as follows: The IT governance is a consequence of the mechanism of corporate governance. It aims to reduce operational risks arising from technological resources through audit processes and controls to ensure the comprehensiveness, completeness and traceability of information relating to the management and treatment of information assets. This regulation has prompted the IT department of each company to:

- Draw its information
- Integrate stored records
- Archive e-mail

### **5. THE CONSEQUENCES OF CORPORATE GOVERNANCE IN INFORMATION SYSTEMS**

The principles of corporate governance are not without consequences on the world of information systems. In particular, the IS department must provide new powers, namely: Information transparency, information access, data reliability, information and data security and information tractability.

Indeed, the information system department should change its rank of cost generator to a role of value creator. It will have a role in orientation of the company and this by answering several questions:

- Does the IT strategy is aligned with that of the company?
- Do IT services meet the needs of the business?
- Does the IT strategy is managed by balancing investment and operation?
- Are the resources well managed?

Management should directly drive the generated value through the computer by:

- Delivering projects on time and respecting budget
- Enhancing the image, the control and the efficiency
- Giving confidence to the image, the control and efficiency
- Giving confidence to customers while remaining competitive with the market.

Management should also measure its performance by:

- Defining and measuring performance indicators to ensure that objectives are being met.
- Using the Balanced Scorecard to ensure its consistency with fundamental issues of business management.

## 6. IT GOVERNANCE

According to the ITGI, IT governance as any other issue of governance is the direct responsibility of executives and shareholders of the company represented by the board of Directors. It consists in steering, organizational structures and processes to ensure that the IT organization fully supports the objectives and strategies of the company.

The objective of IT governance is to ensure that IT meets indeed the following objectives: Alignment with business objectives and expected, allowing the firm to exploit opportunities and maximize profits, optimizing the use of computer resources and managing the risks adequately.

Today, IR governance as defined by the ITGI boils down to 5 issues. For each dimension, it comes to an inventory, develop recommendations and finally establish an action plan.

- IT strategic alignment: an analysis of the IT strategies, positioning of the CIO within the enterprise, organization and skills,
- IT value delivery: An analysis of management methods of the IT value at both of the projects activities (economic justification of projects, benefits types, portfolio matrices...)
- IT risks management: risk analysis and sensitivity by integrating the key concerns of security and IT.
- Performance measurement: analysis of practices in guidance and control computer management (dashboards, reporting...)
- IT resource management: analysis of asset management hardware and software, policies subcontracting and outsourcing for each dimension, the repository will indicate the state of the art and the state practice to allow the company is located.

How to structure the governance of information systems in an organization? Unlike corporate governance can refer to legislation such as the NEP (New Economic Regulation-2001), SOX or LFS, up to this date, no official text defines the implementation protocol of IT governance, only practice and feedback are used for their purposes.

Before starting an IT governance process, we must first ensure the availability of computer and human resources to be implemented to support and develop optimal activity of the company and hence its ability to create value. This creation of value should not be done without any control and risk management which is an integral part of human activity. This risk management is considered as a strategic area in IT governance implementation process implementation.

Audit and control are essential elements in any governance system. They start to become more prominent in the conduct of information systems. With the stock market crisis of the 2000s and with the use of financial security laws first appeared in 2002, audit and control are no longer reserved solely for accounting.

The use of standards (COSO, COBIT, ITIL, CMMI...) is sometimes necessary. These tools can be used together to scan all strategic areas of IT governance.

## 7. CONCLUSION

We have to keep in mind that the objectives of information system are still led by business objectives. Thus, the involvement of all levels of the company (from the branch to users) is still necessary at the earliest stages in order to better anticipate the inevitable management resistance to change.

Thing to remember is that, the evaluation cost of the realization of this governance approach must have been related with the ultimate goal of value-realization.

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