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## **IT GOVERNANCE FUNCTIONS AND AREAS OF APPLICATION IN AN ENTERPRISE**

### **Summary**

*IT Governance makes the IT solutions align with the business. It is currently one of the key objectives of the board. Taking the lead over IT by the board and chief executive officer prevents security breaches, project failure, the company's reputation damage. Fraud scandals at the beginning of 21<sup>st</sup> century did raise the bar for audit standards worldwide. The management is required to report on the quality of the internal control over financial reporting. The transparency of running the business increases the interest of potential investors. The information becomes the most important asset of the company and very often determines the market position and that is why the security of the organization's information is extremely important. Modern IT solutions not only make the operational side of the business easier but also help to make the strategic decisions faster based on the accurate data from the IT system. The most typical benefits of it are greater competitiveness and better shareholder returns.*

*The article attempts to present the idea of IT Governance. The main aim is to highlight the importance of the IT solutions and their impact on the business. The paper is composed of four parts. The first part presents the background of the IT Governance. It explores latest fraud scandals as results of failures in the corporate governance and IT systems. The second presents definitions of IT Governance and attempts to explain the idea of it. There are also presented the most typical and most obvious benefits of IT Governance implementation and its positive impact on the whole organization. The third part focuses on the description of the main areas of the organization where the IT Governance is present and the last part shows the main functions, some benefits and impacts on the business performance.*

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## **1 Introduction**

The Polish definition of *IT Governance* is translated analogically to *Corporate Governance*, however, Polish scientists have some problems with the word *governance*, as it has no clear equivalent in our language.

*IT Governance* became incredibly popular after a series of corruption scandals in the USA and Europe, which exposed the ineptitude and gaps in corporate governance, including information technology systems. The role of the IT department was perceived differently. It was assumed that it should cooperate and contribute to the achievement of the whole company's objectives, not only provide services or solve current IT problems of other departments or organizational units. Moreover, the issues of profitability of investments in IT and management and protection of information in order to minimize risk were emphasized.

The aim of this paper is to present what IT Governance is and how it has been defined by various authors. Due to the fact that it is an integral part of corporate governance, I will present the gaps concerning supervision which contributed to the introduction of changes in regulations and forced greater interest in IT solutions. Special attention will also be paid to people involved in the process of making decisions concerning implementation of IT Governance and the need for involvement of the board of directors will be postulated.

Then I will present particular areas covered with IT Governance and the function performed by it. I will show the main benefits resulting from IT Governance operating in an enterprise.

## **2 Corporate governance irregularities on the example of corruption scandals**

Corporate governance is not a new concept, it appeared together with separating ownership from management and was initially identified with owner supervision. The development of this area was affected by dispersed ownership forms and origin of joint stock companies, in which a vital element was supervision. In the 1980s, with numerous mergers and acquisitions in the USA and European privatization and economic transformations originating in the 1970s, corporate governance became the object of wider interest [Mesjasz 2011, pp.18-19].

*Corporate governance* has been translated into Polish in a number of ways [Mesjasz 2011, p.15]. However, there is no single definition stating exactly what corporate governance is. The Organization for Economic Cooperation and Development (OECD) in the preamble to "*Principles of Corporate*

*Governance*” defines „*corporate governance*” as a system of managing and controlling business organizations which assures division of rights and responsibilities between various groups of interests involved in the company activities, and also determines the rules of establishing its objectives, means of achieving them and monitoring effects of company activities. It also emphasizes the significance of relations between the executives and company organs, its shareholders and other groups interested in company operations. The structure of this system consists of a set of various mechanisms and institutions which allow shareholders and other stakeholders to supervise the company [Principles of corporate governance 2004, p.11].

The past decade has brought the revival of interest in corporate governance due to corruption scandals that took place in the USA and Europe at the beginning of the 21<sup>st</sup> century. They showed weaknesses of corporate governance and demonstrated numerous irregularities in its functioning. As there were instances of law violations and in order to prevent further abuse, governments of many countries implemented some amendments to the law governing public companies listed on stock exchange and other companies. The last financial crisis from 2008 may contribute to further changes in corporate governance [Mesjasz 2011, pp. 19-20].

Recent years have brought revelations concerning unethical behavior in management of corporations, based on misleading or even false information concerning accounting and incomplete or illegal audit procedures. Scandals involving such companies as Enron, Adelphi, Xerox, Arthur Anderson, ImClone, Tyco, WorldCom, Parmalat (Europe) drew the attention of public opinion on irregularities in corporate governance related to bad practices and improper behavior of employees at executive posts and to potential associated risk. Greed and misappropriations led to charging top managements with falsifying financial results, hiding information about the true financial situation of enterprises and embezzlements. The situation was further worsened by the fact that professional, external audit companies misled and cheated their clients or, in cahoots with their clients, cheated public opinion [Danter 2011, p. 13].

There are various regulations concerning corporate governance covering the area of the home country, Europe and the whole world.

„*OECD Principles of Corporate Governance*”, applicable all over the world are the widest-reaching and most universal. They constitute a model for domestic regulations in OECD member countries. Although they do not belong to this organization, some countries are inclined to follow these principles in order to increase investors trust in them [Jerzemska 2011, p. 174]. The document consists of two parts, the first presents five principles of corporate governance, the second comprises commentaries to the rules

presented in the first part. The main principles are: the rights of shareholders, the equitable treatment of shareholders, the role of stakeholders, disclosure and transparency and the responsibilities of the board [Jerzemowska 2011, pp. 176 – 177].

The history of contemporary regulations related to corporate governance in the USA dates back to 1978. Corruption scandals from the beginning of the 21<sup>st</sup> century resulted in passing the Sarbanes-Oxley Act (SOX, Sarbox) in 2002 by the US Congress. The act became federal law and was one of the strictest world standards of corporate governance [Jerzemowska 2011, pp. 189 – 190]. The act obliges CEOs and Directors of Finance to certify the correctness of financial statements and forced independent, external auditors to document operational effectiveness of their supervision and the structure of financial statement supervision. If any of these requirements is not observed, auditors may receive severe financial punishment [Danter 2011, p. 14].

Legal regulations in corporate governance account for the fact that corporations build discipline and the program of readiness for rigorous audits and assure their continuous, successful execution. Internal auditing organs responsible for this must choose the method of measure in order to be able to check and ensure balance and to create procedures ensuring integrity and honesty inside the company. This is not an optional solution, though. Currently it is the CEOs who are liable for correctness of financial statements [Danter 2011, p. 14].

The European Union also initiated work on corporate governance, issuing a number of directives, recommendations and statements [Jerzemowska 2011, p.184]. In 2004, the European Commission established the European Corporate Governance Forum, consisting of 15 members whose task is to monitor the codes of good corporate governance practices in EU countries. The result of their work are numerous announcements and recommendations which formulate guidelines and suggestions. Work on perfecting regulations related to corporate governance is still being conducted and new documents are bound to appear soon [Jerzemowska 2011, pp. 188 – 189].

### **3 Definitions of IT Governance**

In their everyday practice, companies manage various assets, such as people, money, fixed assets, as well as all kinds of relations with their customers and suppliers. However, it is information that is becoming the commodity whose value and significance are growing constantly. Business needs change all the time, while systems seem to be rigid. That is why various investments in IT are made, aiming at streamlining work and catching up with ever-growing market requirements. Increasing the effectiveness by

means of IT technologies accounts for the fact that managers lose control and voluntarily delegate some of their responsibilities to their subordinates.

Contemporary IT systems are adjusted to processes taking place in organizations and constitute their foundations. Responsibility for effective use of IT tools is not restricted only to IT department, but also concerns managers and leaders at all levels of management. Obtaining added value and return on investment related to IT increases competencies and professionalism of the whole organization [Weill, Ross 2004, pp. 1 - 2].

There are many definitions of IT Governance. One of the first definitions was proposed by Weill and Ross. In their opinion, IT Governance precisely determines the right to make decisions and indicates framework of responsibility in order to encourage desired behavior while using IT technology [Weill, Ross 2004, p. 2]. IT Governance Institute also emphasizes that it is the structure of various types of ties, interdependencies and processes allowing to control the enterprise as far as achievement and realization of its objectives are concerned. Return on investment in IT and processes greatly influences increasing value of an enterprise while limiting risk [<http://www.itgi.org>].

IT Governance formulates and explains the vision, responsibility and rights to make decisions concerning IT strategy, resources and actions related to controlling. It is a specific collection of many elements, covering:

- management,
- planning,
- company policy,
- business practices and processes, taking into account the rights to make decisions,
- controlling and measuring effects and return on investment in IT,
- data safety and protection.

It is to provide continuous activity of an organization and conformity to legal regulations and internal policies [Selig 2008, p. 9].

In 2009, Van Grembergen and De Haes, referring to the origin of IT Governance, defined it as an integral part of corporate governance. All implemented processes, structures and related mechanisms are to ensure that investment in IT supports company activities and meets its requirements, thus allowing it to achieve added value while reflecting the need to enforce responsibility [Van Grembergen, De Haes 2009, p. 3].

IT Governance focuses on the direction and supervision of IT. These activities cover strategies, plans and objectives concerning IT solutions which must be coherent with the objectives of the whole organization. Supervision also covers the resources possessed by IT department, both tangible and intangible ones. IT technologies should meet the needs and support

management processes, however, it is necessary to measure value provided by investment in this area. Currently, IT solutions should be flexible enough to quickly react to changing market needs and help in achieving results and offer the possibility of measuring them.

Following the growing significance of IT and an increasing number of organizations, the board of directors has become the organ which, apart from its current tasks, is responsible for the strategy concerning IT solutions, investment in this area and its supervision [Selig 2008, p. 5].

IT Governance itself is not for making IT decisions – this is the board's task. IT Governance is to indicate the people who systematically contribute to making such decisions. It is to facilitate observation of general principles of corporate governance. By focusing on managing and using IT tools, it allows us to achieve our corporate objectives. Implemented IT Governance enables the company to control business processes and limits the risk associated with conducting activities through limiting or depriving employees of the possibilities of improper behavior, inconsistent with company vision and values. Their activities which are against company policy are blocked by the IT system in which all processes and transactions take place [Weill, Ross 2004, pp. 2 - 3].

Managers do not have sufficient knowledge or motivation to make decisions which would be beneficial for the whole company. This is because in their daily work they deal with and focus on achieving the results of a particular department. They do not consider the effects their decisions may have on the enterprise. In order to solve their current problems, they insist on implementing IT solutions which may not be beneficial for the whole company. IT Governance is to prevent such behavior. It allows that the budget for IT expenses takes into account some small expenses on solving individual problems or satisfying specific needs, however, it stipulates that there is no rule granting each team some money for their IT needs [<http://radar.oreilly.com/2011/01/why-is-it-governance-so-diffic.html>].

The implementation of IT Governance cannot take place without participation of the board of directors. Their leadership and involvement requires regular and systematic approach, their active participation in various meetings concerning project progress. Employees, like representatives of middle management, do not have sufficiently deep and broad understanding of organizational objectives, nor do they have sufficient authority to determine and allocate priorities and make strategic decisions which will contribute to the support of organizational objectives [Kress 2010, p. 37].

## **4 Elements of IT Governance**

IT Governance is not only IT, but also business structure, processes and standards. It guarantees that while the company realizes its strategy and reaches its objectives, it meets requirements and acts in accordance with internal regulations and law [Calder 2007, p.12].

More and more activities in an enterprise depend on IT systems. That is why the significance of risk concerning digitization and observing management procedures is growing. Any faults or defects in this area may have grave consequences for the effects reached by the enterprise. Risk management in IT is a vital element, ensuring good functioning of a corporation [[http://www.openpages.com/solutions/it\\_risk/it\\_governance.asp](http://www.openpages.com/solutions/it_risk/it_governance.asp)].

### **4.1 Internal control**

SOX regulations forced stock exchange companies registered in the USA to introduce IT Governance to reporting financial results and in operational control. Institutional investors also exert pressure on private-owned companies to meet the SOX requirements, which accounts for the growing interest in IT Governance [<http://glossary.tenrox.com/it-governance.htm>].

In every organization there are reporting lines which can be transferred and implemented in operational systems to measure and compare results with targets. The development of operational structure of reporting allows us to control the results and activities of the enterprise more easily and quickly. Another area in which reports and various statements generated by the system can be applied, is internal audit, aiming at preventing and discovering all kinds of negligence or oversights. It is something more than internal control. The board of directors should establish an organ authorized to hold such controlling powers, equipped with knowledge of the areas which it controls. The effect of auditors' work should be reports on conducted audits with objections and guidelines concerning future actions. They should not only aim at discovering irregularities in current processes, but they should also focus on potential future threats [Calder 2005, pp. 123 - 124].

### **4.2 Data protection**

Information and information technology have become the most important element of contemporary economy and modern enterprises. We can observe a growing overdependence of enterprises on information systems. Legal regulations and public opinion are increasingly interested and concerned about proper use of information, this especially relates to personal data protection.



The fear of crime and cyber-terrorism in recent years has aggravated and this situation is bound to worsen. Many organizations perceive information as the area which should be protected by corporate governance, as a system of internal control [<http://www.itgovernanceusa.com>].

### **4.3 Risk management**

Meeting requirements concerning IT risk is becoming an increasingly challenging task due to growing complexity of the relation between risk, progress and results and growing complexity of various types of IT initiatives forced by other departments. Until quite recently organizations have had to rely on fragmentary and heterogeneous, sometimes even divergent approaches to managing risk related to new technologies. Reliance on risk management, which is closed in some kinds of silos of various departments is both expensive and ineffective. In this case it is impossible to understand the negative influence on the whole organizations which may be made by any failure or mistake in technological policy or processes [[http://www.openpages.com/solutions/it\\_risk/it\\_governance.asp](http://www.openpages.com/solutions/it_risk/it_governance.asp)].

It is worrying that auditing agency, while examining the method of conducting control and preparation for self-auditing of companies, will pay more attention to IT processes and will evaluate the way of their effective use in conducting the control. Proper financial statements and business processes are forced and depend on effective implementation of control using IT tools. Currently, more than ever before, all functions of an enterprise are very closely tied with the control system using IT tools. IT systems are the foundation of all business processes, many functions depend on or are powered by the data from automated systems. Integrity and honesty of data from these systems is reflected in various statements and reports, which are the basis for making important and sometimes critical decisions concerning the future of an organization. Controlling in this area is necessary to ensure that detailed data, at the appropriate time, is passed to and process in business processes. Negligence of IT control in management poses a serious threat to the existence and operations of the whole company [Danter 2011, pp. 14-15].

## **5 IT Governance functions**

In recent years information has gained significance and become the key resource of every enterprise. Paradoxically, growing expenditure on information protection is beneficial for companies which succeed and can develop competitive advantage thanks to it. Modern information technologies have become an indispensable element of competitive advantage. IT not



only supports standard processes, enables quick transmission of data and continuous information flow, but it also has become a foundation on which company's operational strategy is built. It is also a challenge for management which should enable and design changes in organizations rather than create obstacles in implementing them [Weill, Ross 2004, p. viii].

### **5.1 Controlling investment expenses on information technologies**

Research confirms that many IT projects fail and a large part of investment in this area brings loss. Some statistical surveys show that between 20% and 40% of the means spent on IT projects is wasted. This amounts to hundreds of billions of euro spent annually. The aim of IT Governance is to limit these losses and to make sure investment in new IT solutions brings true and measurable value for the whole enterprise [<http://www.bestpricecomputers.co.uk/glossary/information-technology-governance.htm>].

The basic tasks of IT Governance are generating value through investment in IT and minimizing risk associated with information technologies. It is achievable only when we implement an organizational structure with well-defined roles and responsibilities for information, business processes, application and the whole IT infrastructure. It is responsibility that remains at the core of IT Governance interest. Value created by right decisions concerning investment in new information solutions should result from good communication between business and IT, as well as from the conviction that they are jointly responsible for it [<http://www.infovidematrix.pl/inspiracje/?p=15#more-15>].

### **5.2 Synchronization of objectives and priorities**

The involvement of representatives of various company departments (for example departments of finance, marketing, sales, production) in IT projects guarantees that both priorities resulting from company objectives and those of IT department are synchronized and everybody is equally engaged in the success of IT projects [Kress 2010, p. 36].

The development and implementation of IT Governance in an enterprise creates bigger value than only the assurance that the board of directors in their work observe good practices and ever increasing domestic and international requirements concerning corporate governance. IT Governance equips the board and directors with certain weapon, both in commercial and legal actions, assuring them that they took proper steps in order to establish and develop the best practices of protecting and perfecting information and

intellectual resources of a corporation, risk management, controlling IT investment expenditure and meeting legal requirements concerning IT and digitization [Calder 2005, p. 23].

### **5.3 Development of intellectual resources**

Corporate governance is a system through which companies are managed and supervised. Initially it focused on shareholders rights, transparency of operations and responsibility of management, but now it concentrates on the structure of company board of directors, remuneration of executives and reporting. It is the board of directors which is considered responsible for developing the main management rules – such as defining strategic objectives, providing leadership, predicting and monitoring management progress and reporting results of one’s work to shareholders – and transforming them into intellectual capital of an organization, information and IT infrastructure. Currently intellectual resources are the greatest value of an organization [Calder 2005, pp. 11 - 12].

### **5.4 Increased credibility**

The challenge of our times and a necessity, especially in the USA, is for corporations to develop programs and provide infrastructure which will ensure readiness and guarantee correctness and precision of information. Managers cannot fully depend on results of external audits and their recommendations, they should create their own internal audit programs in order to regain credibility and trust of shareholders. Meeting this challenge is a critical factor for many enterprises if they want to survive and be successful [Danter 2011, p. 13].

Corporations must restore ethical and honest behavior and return to the basic effective corporate governance. It is also necessary to have solid, strong and well-conducted audit programs which will supply the board of directors with tools for restoring trust and self-confidence in action. Past experience shows that we should not over-depend on external audit companies, internal audit infrastructure should be the priority. The preparation for being audited emphasizes the need to establish ethical standards and expectations, education, change of behavior, preparation, open and honest communication and implementation of reasonable and solid managing and controlling practices [Danter 2011, p. 14].

It is currently expected that public companies should be managed in a transparent way. We can observe certain divergence here, connected with the necessity of maintaining confidentiality of data. Many managers do not

see that digitization allows us to perform both functions simultaneously. They treat IT only as an operational and functional element and do not understand its strategic significance. Organizations which promote development and are managed by people who grew up together with the development of IT, support and facilitate the development of this area. In the future IT Governance will definitely become more important than corporate governance is now. Information and IT are fundamental for the survival of the company. Organizations will make IT an element of their competitive edge [Calder 2005, pp. 11 – 12].

## **6. Conclusions**

IT Governance is not restricted only to IT specialists. Correlating organization's objectives with IT investment is a great challenge and requires involvement of many people from various areas of the company. Thanks to it we can prevent situations in which only one department benefits from IT, while the investment itself does not offer satisfactory return and does not match the real needs of the whole organization.

On one hand, IT solutions should facilitate conducting business operations and access to information, on the other hand, they should protect information against falling into the wrong hands. Information has the greatest value in contemporary world and it determines the competitiveness of many enterprises.

Requirements concerning companies listed in stock exchange oblige them to conduct effective internal controls as well as being audited by independent institutions. To perform this obligation efficient IT mechanisms in reporting are necessary. Many IT applications created in order to meet specific, sometimes unrelated, operational needs, do not offer this opportunity. IT Governance is to ensure decisions related to new investment not only solve current functional problems but also take into account other elements allowing more efficient and effective supervision of business processes.

Investors and other stakeholders expect the company to be managed in a transparent way. Numerous systems of collecting data do not support building trust. Moreover, they make it difficult to measure return on investment in IT. Individual decisions of particular departments are often more costly and less efficient than solutions covering most of the organization.

People holding power in the company play a key part in decisions concerning IT solutions. This is mainly due to their liability for passing information to the stock exchange and the obligations they have to ensure efficient mechanism of corporate governance. Taking into account Polish reality, we should consider whether members of the supervisory board (or

of directors) representing investor and capital owners, should participate in making such decisions. They are most interested in the future of the enterprise and want it to be managed in accordance with the law and to generate profits. Investment in IT is often very costly, while accepted solutions constitute strategic decisions determining competitive position of the company.

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