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ASSESSMENT OF THE IT GOVERNANCE PERCEPTION WITHIN THE ROMANIAN BUSINESS ENVIRONMENT

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ABSTRACT

Over the past few years, the implementation of IT governance concept has increasingly gained the attention of the Romanian companies' senior management. IT governance is a comprehensive term that encompasses IT processes, IT resources, information, business and legal issues, and all concerns stakeholders, senior management, process owners, users, auditors and suppliers. Furthermore, the implementation of IT governance, driven by best practices, ensures that the IT function adds value to the company while balancing risks versus return. The purpose of the research is to analyze the degree of perception, acceptance, implementation and maturity level of IT governance at the level of Romanian companies. Moreover, it offers a comparative analysis between the Romanian results and the worldwide level data published by the IT Governance Institute. This institute is interested in all issues related to IT Governance and has developed a database of opinions, facts and statistics on the aforementioned subject. The research is focused on determining the perception on the importance of IT to the business, the IT governance accountability, the outcome of IT, the most used frameworks for implementing IT governance, and a self-assessment of the IT governance maturity level for the Romanian companies.

Enterprise Governance, Corporate Governance, IT Governance, Risk management, IT risk, Maturity Level

INTRODUCTION

IT can be a powerful resource in helping a company to achieve and to expand its objectives. IT is an enabler for key process automation, cost savings and can be the cornerstone for new business models. As a consequence, IT leads to increased

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competitiveness and facilitates innovation. The IT function role has shifted from just support to a more complex one, meaning sustainability and growth for the business (ISACA, 2008).

Today economy brings a new spectrum of IT related risks, such as disclosure of confidential data, non-availability of services negotiated due to systems downtime, or missed business opportunities caused by a rigid IT infrastructure. In many companies, the pervasive use of information technology has created a critical dependency on the IT, thus the need for the IT governance has emerged.

The importance of IT governance can also be attributed to the complex regulatory environment faced by the companies, like the Sarbanes-Oxley Act, Basel II or other laws issued by national regulators. In the EU, Basel II is applied to all internationally banks, regardless of size, via EU directives. The objective was to introduce a new approach to risk through a stronger risk management practice that covers the complexity of information technology and information management risks also (Unchiasu, 2009).

IT governance consists in leadership, organizational structures and processes established to direct and control the use of IT in order to achieve and expand the enterprise's goals and objectives (ITGI, 2007b).

The purpose of the research is to analyze the degree of perception, acceptance, implementation and maturity level of IT governance at the level of Romanian companies. Moreover, it offers a comparative analysis between the Romanian results and the worldwide level data published by the IT Governance Institute in the third edition of the paper: "An Executive View of IT Governance". This institute is interested in all issues related to IT Governance and has developed a database of opinions, facts and statistics on the aforementioned subject. The results of the research provide information on how IT topics like: importance of IT function within enterprise, whether IT performs according to expectations, IT governance accountability, the potential for innovation that IT can offer, effectiveness of IT governance and perception of the IT governance maturity, and the most frequently used frameworks for IT governance implementation are seen by the Romanian business environment (ITGI, 2009).

1. IT GOVERNANCE FRAMEWORK

Enterprise Governance is a relatively new term that refers to the way an organization is managed. "Enterprise Governance constitutes the entire accountability framework of the organizations. There are two dimensions of enterprise governance – conformance and performance, which need to be in balance." This statement captures the essence of enterprise governance as described by the International Federation of Accountants (IFAC) in the report "Enterprise Governance – Getting the Balance

Right" (IFAC, 2004). Corporate governance is seen as the conformance part and is defined as the process carried out by the board of directors, related committee, on behalf of and for the benefit of the company's stakeholders, to provide direction, authority and oversight to management. It has received increased attention in recent years due to the uncertainties and fears in the capital and equity markets. The corporate governance is not only a one-time process that provides direction, but also a continuous one, that requires communication and delegation among the board, management and personnel.

IT governance is an integral part of enterprise governance, a combined business and IT issue which requires a business driven approach. According to the Information Systems Audit and Control Association (ISACA), IT governance has been defined in the "Board Briefing on IT Governance" document as "the responsibility of the board of directors and executive management, and consists of the leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organizations strategies and objectives." Furthermore, the implementation of IT governance ensures that the IT function adds value to the company while balancing risks versus return (ITGI, 2003).

IT governance is a comprehensive term that encompasses IT processes, IT resources, information, business and legal issues, and all concerns stakeholders, senior management, process owners, users, auditors and suppliers (ISACA, 2004, 2011). A critical path to the success of IT governance is an effective communication among all parties involved, based on a common language, constructive relationship and commitment in addressing the issues. The need to manage and mitigate the IT related risks is another driver for IT governance (Nastase *et al.*, 2007).

IT governance integrates and institutionalizes best practices and is an enabler for the company in taking full advantage of its information, thus maximizing benefits, gaining competitive advantage and exploiting successfully the opportunities. IT governance solutions provide total transparency of the IT projects and investments, the control needed for the optimization of the business and assurance for compliance with relevant standards and regulations (Gheorghe, 2006).

Basically, the IT governance is made of two issues: IT delivers value to the business and IT risks are mitigated to an acceptable level, which can be translated into strategic alignment of IT with the business and establishment of accountability within the enterprise. Both need to be supported by adequate resources and tools for performance measurement so as to monitor progress towards the desired goals. Therefore, five main focus areas were defined by ISACA in the "Implementing and Continually Improving IT Governance" guideline, all driven by the stakeholder values: Strategic alignment, Value delivery, Risk management, Resource management and Performance measurement (ISACA, 2009).

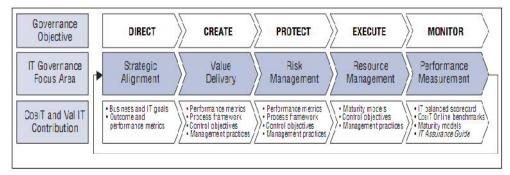
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2. IT GOVERNANCE LIFE CYCLE

Various regulatory bodies and professional organizations have developed frameworks and good practices for efficient and effective IT Governance. Treadway Commission, Bank for International Settlements, OECD issued reports on corporate governance since the early 1990's. ISACA together with the IT Governance Institute (ITGI) have developed several guidelines for the IT governance implementation using COBIT and Val IT frameworks (ITGI, 2007a), as well as for the implementation of each of the five domains of IT governance topic: Strategic alignment, Value delivery, Risk management, Resource management and Performance measurement. Methods, tools, best practices and benchmark data related to the IT governance domains are subject to many researches (see ITGI, 2005a, 2005b, 2005c, 2005d, 2005e; Sandrino, 2008; De Haes & Grembergen, 2008; Wallace & Webber, 2012)

According to the "IT Governance Implementation Guide" issued by the IT Governance Institute, IT governance has a lifecycle as shown in Figure 1, which ideally should start from the alignment area, but for a specific objective it can be introduced at any point, as long as it is a cyclic process. Once the business and IT strategy are aligned, the implementation concentrates on delivering the value promised by the strategy and addressing the risks that need to be mitigated. The IT resources should be managed so as to deliver the value promised at an affordable cost and within an acceptable level of risk. The strategy should be monitored and measured through precise metrics, and based on the results to be realigned with the stakeholders' values.

Figure 1. IT G	overnance Cycle
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(Source: ITGI, 2007a: 18)

3. RESEARCH APPROACH AND METHODOLOGY

The purpose of our research is to analyze the degree of perception, acceptance, implementation and maturity level of IT governance at the level of the Romanian companies. Furthermore, it offers a comparative analysis between the Romanian

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results and the worldwide level data published by the IT Governance Institute in its third edition paper: "An Executive View of IT Governance" (ITGI, 2009). This institute is interested in all issues relating to IT governance and has developed a database of opinions, facts and statistics on the aforementioned subject. The research was conducted in late 2010.

The research is focused on:

- determining the perception on the importance of IT to the business;
- determine the IT governance accountability;
- \blacktriangleright the outcome of IT;
- ➤ the most used frameworks for IT governance implementation;
- ➤ a self-assessment of the IT governance maturity level for the Romanian companies.

We started our research with a literature review related to the IT Governance subject and to any survey made up to now (ITGI, 2009; Nastase *et al*, 2008). Then, we followed the next steps:

- designing of a questionnaire for gathering the data which includes principles of IT Governance;
- determine the target population;
- cluster analysis of collected data;
- > presenting the results and conclusions.

The total number of completed and usable responses of the questionnaire was 109. More than a quarter of our respondents act in banking and financial services, nearly a quarter are in IT and telecom business, while 15% in professional services. The remaining responses were split between manufacturing, retail, construction and other sectors. We must point out the high response rate and the increased degree of awareness related to IT governance concept in banking and financial services and a small response rate and interest on the aforementioned subject in manufacturing area. The questionnaire was sent to professional associations, and individually, to large companies.

4. DATA ANALYSIS AND FINDINGS

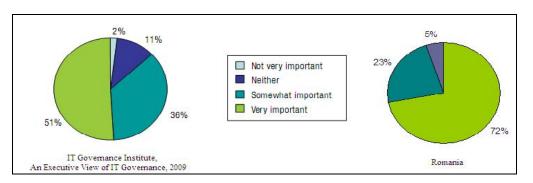
The analysis of the data collected revealed the following:

A. The importance of the IT function within the company

Worldwide, more than half of the respondents consider IT very important for the enterprise's ability to achieve its strategy. In Romania, more than 70% of the respondents see Figure 2, consider the IT function as very important, while almost a quarter noted a somewhat important contribution from IT. Worth mentioning there

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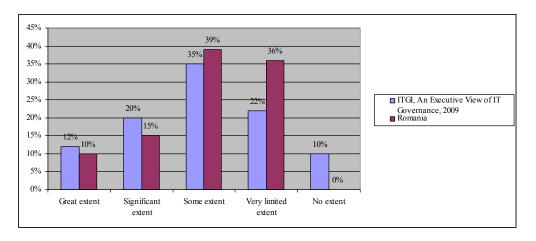
was not even an answer saying "IT is not important for the company". We can explain these results by the structure of the respondents, since nearly 70% were in businesses where technology is intensively used.

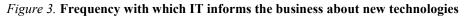




B. The extent to which the IT function informs about potential business opportunities enabled by new technologies.

The results show that the frequency with which IT informs the business about the use and benefits of new technologies is limited - about 75% of respondents. Based on this, we can conclude the innovation role of IT function is low. At the level of Romanian companies, IT is seen more like a support function rather than a structure able to create a competitive advantage. As a result, actions are required from the IT management to become an enabler for business growth through innovation.





C. IT performance opinions

Almost all our respondents agreed that the investments in IT have generated value for the company and the majority of them consider that IT performs in line with their expectations.

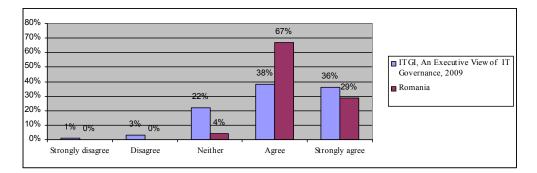
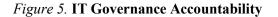


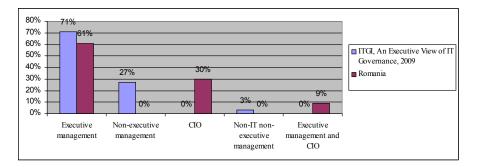
Figure 4. Creation of value from the IT investments

The survey indicated that more than half of the companies have established performance metrics, but the majority of them have responded that monitoring activities of these metrics occur on an ad-hoc basis. As a consequence, due to the absence of continuous activities that analyze indicators against targets, it is our belief that there was a subjectivity factor in the responses towards an optimistic level.

D. IT Governance Accountability

In line with the worldwide opinion, the executive management was clearly identified as being accountable for IT governance. The Chief Information Officer (CIO) was indicated as being the only responsible for the IT governance by 30% of our respondents. Moreover, the CIO is seen as part of the executive team by 26% of our respondents, while at worldwide level the percentage exceeds the 50%, according to the ITGI data survey.





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E. Effectiveness of IT Governance

The key questions were:

- ✓ The IT governance efforts are integrated with the overall enterprise governance arrangements within your company?
- ✓ The IT strategy is aligned with the business strategy within your company?
- ✓ Which of the following statements best describes the perception of IT Governance within your company? The question was followed by a description of the six levels of maturity, so the respondents have answered based on the explanations and not just indicating the level number.

All the respondents have selected the option "yes" for the first two questions, which shows a high awareness level, at least for the theoretical part.

The responses regarding the maturity of IT Governance mirrors the bell curve, see Figure 6. The vast majority of responses are reflected to the middle opinions, level 2 and level 3. Compared to the ITGI survey results we underline the following:

- level 5: the Romanian results show that a very limited number of respondents, almost one third from the worldwide level, have processes refined to a level of good practices;
- level 4: only 6% of the respondents, which is almost half from the worldwide level, monitor and measure compliance with procedures and take actions when necessary;
- level 3: 34% of our respondents consider that their companies have reached the stage where procedures have been standardized, documented and communicated through training. The percentage rate is higher than the worldwide level of 20%, a possible explanation could be the low level of percentages obtained by level 4 and 5.

It should be mentioned that the desired level of maturity that a company intends to have should be correlated with its resources, industry and strategic priorities.

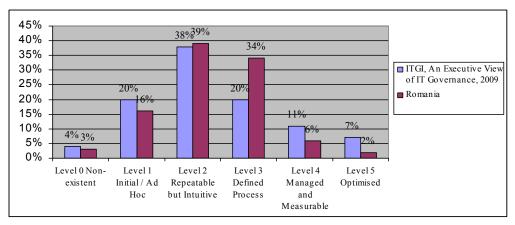


Figure 6. Perception of IT Governance Maturity

F. The most frequently used frameworks for IT governance implementation

The most frequently used frameworks for IT governance implementation in Romania are ITIL, COBIT and ISO 17799, chosen by our respondents in almost the same percentages.

Based on the results, we must underline the following:

- many respondents have selected not just one framework. Judging the close percentage rate we may conclude that most of them have chosen multiple options, mainly the three aforementioned frameworks ITIL, COBIT and ISO 17799.
- respondents with the option "Group internally developed framework" are mainly branches of multi-national companies that have implemented the model of "mother" company.
- the usage of COBIT and ISO 17799 has become popular due to the support and encouragements of the ISACA members, employed in different management positions and due to the increased number of security audits performed, respectively.

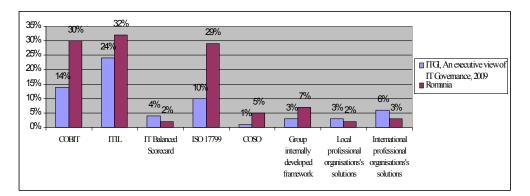


Figure 7. The most frequently used frameworks for IT governance implementation

CONCLUSIONS

The results of the research revealed the opinions of the senior management of the Romanian companies about the following topics:

- importance of IT function within their enterprise;
- whether IT performs according to their expectations;
- IT governance accountability;
- the potential for innovation that IT can offer;
- effectiveness of IT Governance and perception of the IT governance maturity;
- the most frequently used frameworks for IT governance implementation.

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Almost everybody agreed that IT function is important and that IT investments have generated value for the company.

The majority of our respondents considers that IT performs in line with their expectations and confirmed the establishment of performance metrics within their companies, but without a continuous or periodic occurrence of monitoring activities. Therefore, it is our belief there was a subjectivity factor in judging the IT performance issue.

Regarding the third matter, the executive management was clearly identified as being responsible for IT governance. The CIO is seen as being not part of the executive team, as it is seen at worldwide level, and was appointed the only responsible for IT governance by a considerable percentage of respondents.

The results indicated the innovation role of IT is low. Therefore actions are required from the IT management to become an enabler for business growth through innovation and also to be a promoter for changing the perception of IT as just a support function.

In their responses, there is a consensus related to the need for alignment of IT and business strategy. Moreover, all the respondents agreed that the IT governance should be integrated in the enterprise governance.

Regarding the perception of the IT Governance maturity, the majority of responses are reflected to the middle levels. We must point out the very low number of respondents that assessed their level of governance maturity to level 4 or level 5. It should be mentioned that the desired level of maturity that a company intends to have should be correlated with its resources, industry and strategic priorities. When a company is able to identify both its current maturity level and the desired one, gaps can be determined and specific actions can be taken.

The most frequently used frameworks for IT governance implementation in Romania are, almost in equal percentages, ITIL, COBIT and ISO 17799. We analyzed the answers of the respondents related to both his/her perceptions of IT Governance maturity and the framework used for IT Governance implementation and we came up with the following conclusion: the self-assessment maturity for the users of one of the aforementioned frameworks is significantly lower than others'. A possible explanation might be that the users of the aforementioned frameworks are more aware of their actual maturity due to the well-documented maturity models within.

As a general impression, we concluded that the IT Governance topic has become an important subject on the agenda of the Romanian companies' senior management and efforts are made for this concept to work in depth and not only at theoretical level. We

must stress out the high response rate and the increased degree of awareness related to IT governance concept in banking and financial services and a small response rate and interest on the aforementioned subject in manufacturing area. A possible explanation could be the increased regulatory environment faced by the banking and financial sector.

REFERENCES

- De Haes S. & Van Grembergen W. (2008) "Practices in IT Governance and Business/IT Alignment", *Information Systems Control Journal*, Volume 2
- Gheorghe M. (2006) "It governance principles", Journal of Accounting and Management Information Systems, vol. 18: 86-102
- IFAC (International Federation of Accountants) (2004) "Enterprise Governance Getting the Balance Right", available on-line at http://www.ifac.org/publicationsresources/enterprise-governance-getting-balance-right
- ISACA (Information Systems Audit and Control Association) (2004) CISA Review Manual, Printed in the United States of America
- ISACA (Information Systems Audit and Control Association) (2008) Top Business/Technology Issues Survey Results, Printed in the United States of America
- ISACA (Information Systems Audit and Control Association) (2009) Implementing and Continually Improving IT Governance, Printed in the United States of America
- ISACA (Information Systems Audit and Control Association) (2011) CISA Review Manual, Printed in the United States of America
- ITGI (IT Governance Institute) (2003) "Board Briefing on IT Governance", available on-line at http://www.isaca.org/Knowledge-Center/Research/Documents /BoardBriefing /26904_Board_Briefing_final.pdf
- ITGI (IT Governance Institute) (2005a) IT Alignment: Who Is in Charge?, Printed in the United States of America
- ITGI (IT Governance Institute) (2005b) *Optimising Value Creation from IT Investments*, Printed in the United States of America
- ITGI (IT Governance Institute) (2005c) Information Risks: Whose Business Are They?, Printed in the United States of America
- ITGI (IT Governance Institute) (2005d) *Measuring and Demonstrating the Value of IT*, Printed in the United States of America
- ITGI (IT Governance Institute) (2005e) *Governance of Outsourcing*, Printed in the United States of America
- ITGI (IT Governance Institute) (2007a) *IT Governance Implementation Guide Using COBIT and Val IT*, 2nd Edition, Printed in the United States of America
- ITGI (IT Governance Institute) (2007b) COBIT 4.1, Printed in the United States of America

- ITGI (IT Governance Institute) (2009) "An Executive View of IT Governance", available on-line at http://www.isaca.org/Knowledge-Center /Research/Documents/An-Executive-View-of-IT-Gov-Research.pdf
- Năstase, P., Stanciu, V., Năstase, F., Gheorghe, M., Boldeanu, D., Eden, A., Popescu, Ghe., Băbeanu, D. & Gavrilă, A. (2007) *Auditul şi Controlul Sistemelor Informationale*, București: Ed. Economica
- Năstase P. et. al. (2008) "IT Governance Implementation to the Level of Financial Institutions in Romania", *The 18th International Conference of the International Trade and Finance Association meeting at Universidade Nova de Lisboa*, Portugal
- Sandrino, B. (2008) "People, Portfolios and Processes: The 3P Model of IT Governance", *Information Systems Control Journal*, Volume 2
- Unchiașu, S. (2009) "Information Controls for Basel II Compliance", 4th International Conference Accounting and Management Information Systems -AMIS 2009, Bucharest, Romania
- Wallace, M. & Webber, L. (2012) *IT Governance: Policies & Procedures*, Wolters Kluwer Law & Business, Aspen Publishers.