Determination of the Effectiveness of Information Security and Audit Accounting IT Informational Program

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ABSTRACT

In the current society, there are many options regarding the use of computer programs for the processing of accounting information. In this paper we propose to develop the method of approach, in terms of technical IT audit, for a program for the management of accounting information, i.e. an integrated ERP-CRM program, used by the majority of Romanian business.

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1. Introduction

Currently, it is found that the accounting is more often "flooded" by the abundance of information technologies, which have proven, with the passage of time, it can bring benefits significant enough and can lead to significant competitive advantages for all actors who are willing to approach them, in the context of a competitive environment that is becoming day by day more and more accentuated. Basically, it appears that in order to survive and in particular to gain success in business, it is absolutely necessary to computerization of all specific activities within each economic entity, irrespective of its profile.

The emergence of complex systems has greatly changed the approach and presentation of information accounting to businesses. Many firms, however, have not yet adapted to the demands of modern information, enabling effective activities. Obtaining relevant information is important, as a result of the trends manifested at the level of the market. Each undertaking must provide direction and information flow to its specialized managers. To this end it examines the information needs of departments depending on which adequate information system is developed. There are, however, major differences between the systems in terms of their complexity and specificity of the industry.

The use in practice of complex information systems lead to the improvement of information and processes underlying decisions, consistent with the requirements of implementing the mechanism of market economy. In terms of conception and its general acceptance, information systems audit shall mean the activity of collecting and evaluating the samples to determine if the computer system is secure, maintain the integrity of data processed and stored, allows achieving strategic goals of the enterprise and the effective use of information resources. Computer audit represents an essential form that checks to see if one IS reaches the objective for which it was prepared. The standards clearly defines the domain, activities, stages, the contents and forms of audit completion. In compliance with the requirements of the standards, information technology audit process result is released from risk comes up. Computer audit represents comprehensive domain in which all audit activities are included for: specification, projects, software, databases, specific processes and life cycle of a program, of a computer applications, of an information system for management and a maximum complexity portal, associated with a virtual organizations.

A well developed informational system consists of several subsystems. The first subsystem that underlies the entire information system is the system of financial management. This system performs automated internal records, offers current information about the volume of production manufactured or services rendered, costs, cash-flows, invoices for payment and receivable. For faster access to a greater volume of information using modern information technologies specialising in this field, which include computerized interlocking systems and internal data processing.

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2. Enterprise Resource Planning (ERP) – software solutions for present and future

In Romania the number of companies that use resource management software products of a company has grown considerably in recent times. With the help of the computer and appropriate software, keeping the accounting of a firm has become much easier in terms of considerable savings of time affected. In addition with the help of a computer program may be withheld for much more information than in the past and the accounting tests results are automatically analyzed.

An ERP computer system is a computer system that centralizes information from all departments, workplaces, so that they are available in both the management and the other members of the organization who need them. A relatively trivial example would be an entry of goods – that becomes a very important information not only for the supply department, and for those from deliveries, marketing, accounting. By the simple operation of this information in such a system, all other users may come into possession of them immediately.

Obviously, there are also flip in the adoption of an ERP information system. It is mandatory that all data to be operated correctly and in time in the system. The information is very important as long as it is up to date. It can be an advantage, because it requires a correct work method, fast and aware from the users. In fact, words that underlie an ERP computer system are information integration.

ERP systems differ to a certain extent, but the basic modules are generally the same, some of them providing management for: accounting, financial, production, sales & distribution, transport, human resources, supply, fixed assets, public relations, projects, e-Business etc. The ERP program has an attractive menu, easy to use which can be adapted both to the needs of your business and the future.

![Figure 1. System Enterprise resource planning (ERP)](Source: own contribution)

**Management Module**

This is a complete solution that allows the control and accounting of stocks, providing the supply on time and according to necessities, as well as increasing deposits through efficient stock management. This module is designed to facilitate the operation of stocks and stock movements quickly and efficiently, so to enable strategic development and improvement of supply requisition process.

**Table 1. The main characteristics of management module**

<table>
<thead>
<tr>
<th>The main features of the module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make available to users the tools needed to create your own organizational structures of warehouse</td>
</tr>
<tr>
<td>Ensure the automatic highlighting in accounting of own accounting notes specific to this module</td>
</tr>
<tr>
<td>Allows the issuance primary record-keeping documents of receipt of goods from the suppliers (NIR) other types of input or output documents with automatic updating of the stock</td>
</tr>
<tr>
<td>Allows issue outgoing delivery notes for stocks without charge</td>
</tr>
<tr>
<td>You can view the information on the availability of the item or group of items</td>
</tr>
<tr>
<td>Allows allocation of cost centres on transactions for which it was generated through accounting notes</td>
</tr>
</tbody>
</table>

**Source: own contribution**

**Supply Module**

The ERP system can track the supply process starting from the estimates of requirements of stocked, through specific stages of a purchase order, tax documents arrival, management of reception of
goods and completing it with links to accounting modules, sales, stocks etc. In this field you can enter company's products in stock or orders may be made by the supply department of.

The structure of the audited application with reference to this module is as follows:

![Supply mode structure](image)

**Treasury module**
Treasury module from the ERP integrates the company's financial flows, tracing in detail every type of operation. To ensure easy operation and high quality information, in ERP specific operation typology problems were implemented, able to establish decision-making processes as well as the analysis of cash flow.

**Sales module**
This module enables the ERP system to (re) organize the activity and tracking of sales process in an efficient manner, because of the multiple configuration options and tracking the sales channels covered. It is intended for the sale of products and has the following form:

![Components of the Sales module](image)

**IT Service Module**
This model of ERP system allows the tracking of the service process in an efficient way, thanks to multiple configurations options and tracking the covered service selling channel „service IT“. It has the following form:

![Components of the Sales module](image)

**CRM Module**
CRM Module (Customer Relationship Management), represents a module from the application of this part of managing our marketing in the company and in particular relations with customers. This is a revolutionary tool in the field of marketing. CRM goes beyond traditional marketing approach focused on the relationship between a product / service and his client or the reputation and brand image and tries to create a good reputation among customers by managing the issues in a timely manner and maintaining post sale relationships.

**Accounting module**
Accounting module of ERP system is designed for the automation of general accounting operations, offering flexibility and utility including large companies with complex activity (with many branches and outlets, foreign currencies).
eliminating the need of creating an overly analytical number. In the case of a company with tens of thousands
of providers who have had transactions on that account. This is true for any accounting account, thus
that generated respective amount. Thus, a balance of the account “401” may be detailed from time to time on
accounting notes receive both for the debtor’s account, as for the lender, operational management subject
through drill-down techniques, to specify the level at which there is a lack of conformity. Generated
operations that perform operations. In the event of legislative changes, generation models of accounting
notes, sharing on the journals of VAT or on accounting registry are maintained as historic, so at the time of
accounting for the regeneration of an operational document, the formula chosen will be active at the time of
the creation of this document, and not the current one. There is a flexibility in accounting operations through
the ERP system. Working in real time ensures an opportunity to examine the partial results at any time, may
intervene proactively in order to carry out corrective actions needed. For example, within the budgetary
process and their tracking completion, can intercalate an intermediate stage of approval of any necessary
expenses, Financial Department can space out applications to ensure compliance with the parameters set.
Also closes the income and expenses recorded in advance, although automatic in principle, can be adjusted
manually so that they can be redistributed as needed.

Another issue often mentioned is related to the accounting of checks the end of the month. These
checks must be performed on the types of operations, on the point of work, once completed, verified data is
recommended to be validated. If the entire period has completed the checking, this closes, to prevent new
operations that affect the accounting results. If an error occurred, it may return in a closed month, with the
condition that the person which reopens to read the question concerning the possible implications. It is
sometimes better to carry out the necessary corrections in the current month, because while the month is
reopened, an user can insert by mistake or in purpose an operational document that can be reflected as
undesirable in accounting balance. Users of older software, that at the close of the month, archives month
data by transferring balances of reopening in a new database take a lot of time closing a month. In the case of
large amounts of data, this operation is time and resource consuming. Senior ERP stores data by using a next
generation enterprise database server that can manage large amounts of data, without requiring their
archiving. This way, closing/reopening transactions per month are extremely facile.

It is important to know that a big amount of ending month specific checks are automated, using an
expandable framework, which allows adding of new checks as their identification as pressing needs. A history
of carried-out checks and of generated results by each running a check, in order to carry out an audit at any
time concerning the degree of assimilation and compliance work procedure.

Audit reports must be effective. They start from synthetic/consolidated statements, following that
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3. The ERP system and the efficiency of financial-accounting department

One of the challenges that an effective ERP need to have a positive response it is linked to the
transfer of operational activities specific to the finance and accounting department from the scope of the
documents operational analysis of financial indicators and control workflows.

This must be done under the conditions in which, as usual, this Department is undersized compared
to the rest of the company structure, the number of those directly or indirectly generates accounting effects
being not only much higher, but also geographically distributed and, in particular, with the specialized
accounting knowledge. In these circumstances, in order to ensure a high quality of information that
operational generates in accounting, it is necessary a great flexibility in configuring the original parameters,
matched by role-specific operational restrictions and powerful tools for analysis and verification.

Flexibility begins at the defining of the accounting plan, without restrictions on the number of levels
of analytical accounts, continuing with the specific subjects of accounting monographs configurations of
operational management (articles, partners, banks, cashiers, vat, customs duties, fixed assets, personal etc)
and by completing with auto-generating formulas of accounting notes specific operations. Thanks to
effectively tackle the structure of generated accounting entries, it is not necessary to create a large number of
analytical accounts, keeping the accounts plan in an accessible, without prejudice to the possibilities of the
accounting statements detailing on the amounts and sources of the components origin.

In practice, using the ERP system can reach a rate of automation for over 95% of all accounting
operations that perform operations. In the event of legislative changes, generation models of accounting
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of products and customers, if the computer system requires the creation of analytical accounts, it follows an accounting balance that looks more like a novel, being virtually impossible to use it.

This flexible structure allowed (for example) at the time of denominate, should we mark RON as the new national currency, the old ROL was widely considered another currency, having a fixed conversion rate, and just re-calculated the national currency equivalent. In this way, all documents remained intact, can be made any subsequent operations on them, without any problems. An important component for financial accounting department is one that allows tracking of cash flows. In this context, there is the treasury module, which aims in detail any operation, whether it is banking operations (including check tracking or BO), cash management, compensation reports, closing advances, personnel operations etc. Concluding, qualitative aspects of financial accounting department can be highlighted on many plans: budgets, cost centres, cash flow tracking, fixed asset management, quality control of operating documents, economic-financial analysis using BI tools, repetitive activities of operating documents can be automated in a ratio of over 95%.

4. Integrated ERP system audit of the Organization

The information society results in a dramatic increase of the dependence of all areas of economic and social life of information technologies. Computer systems are complex constructions that cover several different problems of a company. Having regard to the use of human and financial resources to the development of a computer system, it is necessary to carry out certain activities which lead to the objective proposed, on time, with established quality levels and within the limits of the allocated budget. One of these activities, particularly important, for both developers, and especially users, is the audit of information systems (SI). SI audit is a branch of general audit dealing with control of information and communications technologies. SI audit is studying, first, computing systems and networks from the point of view of the effectiveness of technical and procedural controls to minimize the risks. SI auditing requires discussion with staff who determines specifications, develop, test, manage, administer and operate computer systems.

Software auditing consists of activities to highlight the degree of correspondence between the program and developed specifications. The audit software gives the measure of safety that must take the user when programs get results. Safety refers to the correctness and completeness of the final results when input data are also correct and complete. ERP forms the backbone of an organization and are "responsible" for internal organizational information and knowledge. The nucleus of this pack of applications has to manage internal data. They are organized in the data warehouse, where are extracted and analysed through decision support systems. For this reason after implementation, These systems should be monitored and controlled to ensure the success of such an approach because the risks are much greater in the case of applications for accounting, payroll and classic fixed assets management. Thus, the audit system is a highly complex process. The team that carried out such audit shall have a variety of specialists, and they, in turn, must have a rich professional experience and extensive theoretical knowledge. A computer system is not audited by the people who mastered the field affected the auditing stage. As in the development of a computer system development cycle, divided into stages, so there are stages of audit cycle. Each stage represents a system of division of labor, and communication is a key factor.

Depending on the size of the project, the following actors should be involved in the auditing of ERP systems:

<table>
<thead>
<tr>
<th>The internal audit section</th>
<th>In the specialty literature it is stated that this is the section which knows the state of the system implemented at its best and areas where an integrated system will ensure the success of the company. Internal Auditors must be part of the team responsible for implementation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Auditors/independent</td>
<td>Even if they do not need to have knowledge about each solution in hand, the external auditors have yet to hold a minimum of knowledge about the functioning of these systems.</td>
</tr>
<tr>
<td>Implementer</td>
<td>Must know very well the solution and understand the business processes to support the planning of audits. Carries out its own audits and certification solution configuration.</td>
</tr>
<tr>
<td>Functional departments</td>
<td>Departmental managers deal with the peculiarities of implementation, each with responsibilities in the area of decision.</td>
</tr>
</tbody>
</table>

Source: Prepared by the author

ERP systems use data from different sectors of a firm to support interdepartmental management and business processes. To ensure success, such systems must integrate all business processes and procedures. At the same time, the success of the implementation depends on the modules of the integrated system, so it takes into account the auditing and information system infrastructure such as the items listed below.
5. Conclusions

For Romanian corporate environments, high entered the integration game, the implementation of enterprise applications suites (Enterprise Resource Planning - ERP) means the performance, efficiency and control of the business. The others still hesitate, considering integration a difficult step, a decision hard to take and last but not least, a hard investment depreciation. In case of implementation of an integrated system, the decision-making process is triggered by the problems that arise in cooperation and interaction between the departments of the organization, to be more precise in their isolation. An ERP system is composed of a series of interconnected modules, between which there are interdependencies, they are intended for different departments, like: production, financial accounting, acquisitions, sales etc. Although it has a highly varied nature, information is handled once and is accessible to any module it is necessary. Thus it saves time, resources, diminishes the probability of committing operating errors and facilitates access to information at any time. One of the peculiarities of a common ERP is storing all the information in a single database. Once implemented, a computer system is required to be audited periodically to ensure that it meets all the required tasks to the highest possible degree of efficiency and effectiveness. The Organization’s growth, increasing business volume, changes in the business environment, technological changes and new requirements of information all places a growing demand on the existing computer system and often require modification or extension thereof on ad hoc bases.

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