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The Need to Adapt to New Financial Accounting Technologies Information in the Context of Global Economic Crisis

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Abstract
Today, accounting is a necessity and not a desire. Concerns for the improvement of accounting practices are necessary, especially in Romania, where these activities are strengthened with the progress of the Romanian economy integration into the structures of the European Union. This paper carried an objective analysis of how the web report is now being made by financial and accounting information, presents the disadvantages of this approach to reporting introduced, but the potential benefits that could be created by the rapid adoption of international standards for reporting financial information website, too. At the same time, the paper tries to create new opportunities as soon as possible regarding the adoption of intelligent technologies, which, coupled with language Web reporting financial information.

Keywords: economic crisis, web reporting, intelligent financial-accounting systems

Jel Code: G11, G17, M15, M21, M41, M51, O16, O33

1. Introduction

In a world of unprecedented tax, accounting science offers solutions for any business development and business coverage: capital structure does not matter, no matter the field, no matter the country. Accounting is, in some way, a science without barriers, and virtually borderless, without accounting, economic activity can not conceive.

In the context of economic globalization, increased competition, the imposition of new high quality requirements, or adapting to new accounting standards require a new approach to economic information system of each entity. The need for pure information, correct and complete, becomes a necessity for each compartment of an organization, especially when proposed to be profitable and efficient solutions for their business. If we take into account these factors and issues more difficult to predict, as is the economic crisis, we find that opportunities to develop and improve specific activities of economic entities is done with a growing difficulty, which necessarily requires their orientation towards new information technologies and especially the most intelligent actor able to assist in substantiating the most appropriate decision-making decisions. In addition, the volume and dynamics of information surrounding the financial and accounting activities of an organization leads to rethink the strategy of integrating rapidity modern information, which enable to design and implement intelligent systems in accordance with the requirements and needs of the

current economic context. Basically, an organization will survive and be capable of the best decisions that would ensure success only when he failed to keep pace with the current trend of computer management. Furthermore, there is a need for intelligent systems to assist the accounting worker, to offer timely and useful information, why not, to prepare the decision for him. Thus, it is possible to achieve this by developing or actual use of intelligent systems and technologies (reporting or analysis) that explicitly addressed financial accounting.

In our country, unfortunately, tend to approach and adapt to new information technologies (and intelligent, too) is quite difficult, the reasons being multiple. In addition, financial reporting accounting information, but their analysis process is also done by traditional means, which makes the decision actors barely manage to obtain the information necessary to make the most appropriate decisions to ensure their business success. This can only complicate any specific financial accounting processes. If at this point we add a negative economic climate, characterized by a strong economic crisis, as our country is facing since 2009, we can say that the possibilities are quite fragile recovery.

Thus, as a solution to the above, the paper tries to raise everyone involved in making every effort to swift adoption of modern usage, reporting, analyzing and processing financial accounting. It is a necessity because Romania is still facing economic problems, and actual use of modern information technology can represent a step forward because it helps managers and stakeholder's officials to receive accurate, complete and obtained quickly.

In this context, the paper in first part addresses some issues need to adopt new information technologies in practice as a means of support for management accounting. In addition, the main directions of research are presented in the context of virtual enterprises and new approaches to business processes. The second part of the paper presents the main aspects of financial accounting information web reporting in the context of economic globalization, new trends and specific financial accounting. In addition, the paper deals with the need to move towards intelligent information technologies and presents the main benefits it can bring these technologies related to electronic data reporting and analysis of financial accounting information.

In the last part of the paper presents some conclusions and possible directions for further research in order to improve activities, but also awareness of managers regarding the adoption of modern technologies in practice.

2. The need to adopt new information technologies

To be able to effectively manage each activity of an organization should have the information accurate, complete, and especially at the right time. The objective of management accounting is to provide such information to make better decisions. Management accounting reflects all income and expenses of an organization so that managers can get a more detailed view of activities and be able to make the best decisions.

For success in business acquisition, most researchers recognize now more than ever the importance and involvement of accounting information systems and ensuring their performance is determined by using methodologies that use information models for analysis and design [Andone, Tabără, 2006, p.110].

WWW and digital libraries is now true warehouses containing huge volumes of heterogeneous data. Accessibility, maintenance, organization or preserve them as tasks required to manage such deposits as much as possible, beyond human possibilities, so to achieve them need the support of automated processes and tools. To attain this objective, we need adequate means to describe these deposits, but the data they contain. In time, they were developed and proposed various alternatives, but there are no consensus yet (widely accepted) on their use. In this context, artificial intelligence has proposed major approaches that can be used with data structures, or object-

relational databases, mathematical logic, different procedures or taxonomies, ontologies model domain specific, etc…

Accounting is a key component of economic information system, knowledge and management-oriented economic values separate ownership. It has the concepts, principles, standards and laws governing the matter investigated. Through them you can tap into the essence of economic phenomena and processes, explaining the connections and interdependencies between them and influence their future development.

However, coupling with the financial accounting information systems provide opportunities for more effective management of specific information, providing a greater variety of solutions for their analysis. As a consequence, any manager of a company receiving and using a financial accounting system has the possibility of a correct management of all information conveyed.

We wonder, however enough if only the use of traditional information systems, given that we are witnessing today a true invasion of modern information technologies and intelligent. These new technologies, management of an enterprise determined to shift to another in order to obtain competitive advantages, but also to build faster, better and more complete information to the huge amount of accounts that characterize that activity.

Currently, the key innovation in a global market penetration is focusing on innovative business model based on e-business, which represents a true revolution in the organization and conduct business. This modern vision paved the way for a virtual enterprise, a new concept involving the analysis of new aspects of the relationship between accounting and processes, structures and organizational behavior and human, social and political environment caused by global business.

This justifies the emergence of new research directions [Andone, Tabără, 2006, p.41–43]:

- the social role of accounting;
- social accounting;
- procurement of necessary accounting information to employees and participatory information systems development, cooperative or collaborative process in which knowledge is dominant;
- study accounting issues virtual organization;
- study the processes that influence creativity and innovation in accounting, the social and political aspects of establishing new accounting standards;
- the study of financial accounting information user behavior;
- revealing new relationships between accounting and other information systems, organizational structures and processes;
- cognitive aspects of accounting and specific decision-making processes;
- modeling the relationship between environment and competitive factors in management accounting change;
- study the influence of accounting information, financial and non on improving organizational performance;
- intelligent design application solutions and/or integrated accounting and audit the use of knowledge technologies;
- the potential rule-based expert systems and other types of intelligent systems on resolving the accounting issues and audit;
- use of knowledge management practices to capture market opportunities and improving enterprise performance.

The increasing complexity of economic activities from an economic entity has direct implications for decision-making process. Thus, the solution lies in abandoning the "routine" and take a further step towards the use of methods based on scientifically sound and thorough study of current reality (with all the risks and difficulties involved) in order to establish causal links between the phenomenon.

Accounting information is the raw material necessary financial and economic analysis has an important role in driving economic units because they have to meet a wide range of requirements. The accounting information is richer, fuller and more complex, the decision maker has greater capacity which would allow a deeper understanding of economic phenomena and processes, and on this basis, adopt effective measures to increase the use of human resources, materials and especially financial. In these circumstances, each organization can move easily over difficult situations caused by economic crisis. I consider therefore that these objectives could be achieved if the managers would have based on information technology systems capable of providing relevant, good quality and timely.

3. Web reporting financial accounting information – solution or need

To ensure effective decision making, but also to survive the economic crisis, with all the problems it may cause, design, development and use of functional and efficient systems providing economic information as varied to model a wide range of requirements and provide a more accurate perception of economic processes to which they relate becomes a necessity. Therefore, it requires economic information to be factual, concise summary, multilateral, operational and provided with precision and reliability. In this context, should be can created sufficient prerequisites to support decision-making departments, so that decisions can counteract the effects of an economic crisis.

The only documents available to external users are those whose publication is obligatory, like balance sheet, income statement, statement of changes in equity, cash flow statement and accounting policies and explanatory notes. To these are added to some companies and an array of financing. In addition to the four financial statements may occur and the annual report of the auditors with further information. By using the content of financial statements, users try to assess the profitability of the company, which involves the measurement of wealth at a time and improve it during the period. Furthermore, each user (manager or investor) seeks to assess the risk of non-cleared the enterprise (company unable to pay its debts), a situation which is characteristic of a period of crisis. The mere use of traditional information technologies will not be able to prevent the effects of economic crises, which can be countered by the actual use of modern information technologies.

Positioning management accounting in the information systems is important because they include information and forecasting are, is by harmonizing them with future reports. Thus, reasoned opinions of those economists who see the management accounting information than historical data and data without the possibility to participate in decisions to establish medium and long periods of time. Overlap and merge the two (accounting, management and modern information technologies) are able to combat the negative effects caused by the economic crisis.

Access to information is an important requirement for every organization that seeks to benefit from a competitive market presence, according to the rapid changes now taking place. All managers want accurate information, provided in real time in an appropriate format and at an affordable price. In the last period of time following the emergence of new information technologies, information systems have evolved to satisfy successful managers.

These systems were able to provide quality information and new modes of interpretation and thus her decision making has undergone a period of improvement. But every day, we find that the requirements become more complex managers and decision-making is done by analyzing and using an increasing volume of information, consisting of increasingly varied. Thus, we believe that this complexity can be addressed and modeled using systems based on new information technologies, and if they are smart, then success is guaranteed.

Broadly, the information system can be defined as a set of human resources and capital, invested in an economic unit, the collection and processing necessary to produce information that will be used at all levels of management decision-making and control activities of the organization.

Following the trends in the market, almost every organization, the need for communication and knowledge is more evident, no matter what activity you are investigating. Thus, communication and knowledge sharing is achieved via a key element: information. Information is an abstraction, a product of intelligent knowledge, but also a pervasive reality. She dominates and explains the universe, obviously to the extent of the knowledge attained. In the economic field, the information is present at the operation most insignificant (a simple transaction) to mega structures: group, multinational, national or international economy. In each of these segments there is a wealth of economic space. Transformations occurred in the size and structure of the component substances are quantified by a property specific language at the figures by accounting [Horomnea, 2001, p.31].

The objective of development or improvement of financial accounting information system using modern information technology is to increase the effectiveness of each specific activity within an enterprise. Currently, the complexity of each system depends on the avalanche of information technology management company faced and the quality of the results of automation is inherently influenced by the technology adopted. Normally, we want to keep up with technological trends, but the desire is not always materialize. The financial situation of the organization, but also found in the reluctance of staff able to manage them and work with them often make their mark on the shortcomings. This reluctance is driven by fear of what's new employee. It seeks information reports (generally accepted accounting principles) for groups of interested users. The set of information for management accounting aims at developing internal reports of interest to the management company for managing the business, developing and implementing plans and strategies, etc. In this regard, all reports are prepared under the enterprise management accounting methods that they deem optimal, regardless of the degree of general acceptance. Basic concerns relating to management and planning for the future with all the challenges involved.

However, the information system aimed at satisfying the information requirements needed to conduct the decision-making process and thus we can consider it a tool of management in order to achieve financial and accounting activities. Many recent technological changes continuously change the vision that we have on the company and its activities. Important changes have affected business structures and behavior, especially changing interpersonal relations. From the organizational perspective, intelligent systems have become one of the most challenging aspects of information technology: the practical implications in the work and role in education. These systems provide real means for simultaneously increasing quality, productivity and innovation organizations in all structures [Andone et al., 2001, p.45].

The emergence of each new technology requires its adoption information quickly to fully exploit the advantages it brings to improve their activities. If an organization remains indifferent to this trend is likely to lose ground to those who have adopted and understood what may be the benefits of new information technologies. Furthermore, developing information technologies (based on modern information technologies) the attention must always be experts in accounting, as today we face a variety of methodologies, techniques, tools and standards that accumulate and share knowledge from several fields, as is the financial accounting. Advancing technology in recent years has brought new electronic platform for analyzing and processing financial and accounting information. But when we say "e" does not refer to compatibility, since each application generates its own output document (balance sheet, income statement, etc.). Which, unfortunately, can not be read directly by a different program? Why not? Since each application stores its data in its own format.

The need for a standard for electronic exchange of financial and accounting information is greater when we want to get data from multiple financial statements published in various formats (pdf, xls, html, doc, etc.). Today, this standard is known as XBRL and is widely accepted international accounting community [Barron, 2007]. Member organizations include financial consulting firms, accounting firms or other institutions, such as:

- *IASB* (*International Accounting Standards Board*);
- *IMA* (*Institute of Management Accountants*);

- *CICA* (*Canadian Institute of Chartered Accountants*);
- *ICAEW* (*Institute of Chartered Accountants in England and Wales*).
- XBRL stands for Extensible Business Reporting is Language and is a standard technology used for:
    - creating financial statements and other documents reporting;
    - financial and business reporting information.

It makes the creation, distribution, reporting and analysis of information more efficient and useful. XBRL is used for financial statements of public companies. As we know, these companies must make periodic reports, most made in ASCII text format or HTML [Cohen, 2004]. These formats can be easily understood by the human eye, but can not be understood, and computer. For someone to analyze this information, they need a crawl in an Excel spreadsheet or other tool, before analysis can be performed. Information technologies have led to an acceleration of the process of preparing and disseminating information and financial accounting knowledge to an increasingly lower cost. However, there are some professionals accountants who focus mainly on preparing data and information and less on their use in decision-making, May we not assume from their discussion of a systematic training in the use of technology knowledge, or the collaborative Web technologies, so important today and probably a more significant role and continue.

As information technologies, globalization and increasing competition have influenced significantly influence business activities and hence, the role of accountants and accounting professionals. Communications is increasingly correlated with the rapid growth of information in real-time power, have allowed for setup of a global market where they can sell products and services companies, wherever they are located around the globe. All these issues have given rise to a vision of how to create value. Information technologies are exploited as opportunities to create new products and services, helping to transform businesses. For profitable growth, managers must identify new sources of creativity and innovation, and in all this effort will involve accountants and economists. This is the paradox of XXI century. Consumers are no longer isolated, but everything connected and better informed, they become more active and have more options, they have satisfied their expectations, and managers need to formulate better strategies. Impact of connection, information and more intense consumer activity occurs on five areas:

- access to large amounts of information about products, companies, technologies, performance, prices and activities worldwide;
- global vision, lack of geographical boundaries;
- high degree of connectivity caused by the Internet's development, but also other types of computer networks, which cancels the dependence of a firm;
- can experiments purchased products and services electronically;
- promote expediency.

The accounting field has changed over last years. Accounting organizations have increasingly been using technology to obtain important benefits. In this context, they are developing accounting data management services to all support their activities. Input for such services comes from data sources that are available today on the Internet. In our opinion, the most important is the Securities and Exchange Commission's EDGAR (Electronic Data Gathering, Analysis, and Retrieval) Internet repository including corporate filings with the SEC. Many Internet official sites provide public access to financial data, analysts' forecasts, news of business relevance and more.
Organizations need give all know, in real time, what chances are in competition. Investors and their management require information and knowledge they offer much more than the traditional annual financial audit. Accounting firms can not respond in real time their customers are automatically at a disadvantage compared to competitors. As a result, the phenomena of virtual global economic environment is the emerging new model of financial accounting audit.

Such phenomena have been studied intensively and led to the adaptation of financial accounting, management and auditing, education and research, accounting, business accounting firms to new challenges. The entire accounting profession is involved in developing strategic plans to identify

and implement solutions to ensure the introduction of new information technologies in the new accounting services performed on existing key skills that will develop. Audit services revolve around the need for confidentiality, authentication and accounting data integrity, accepting the demands of customers trust the profession, conducting transactions in the virtual environment conditions.

Under these conditions, many of the accounting activities, including auditing, requires involved in the virtual environment, operators can realize intelligent agents. In the case of audit, intelligent agents can provide a range of qualifying activities that add value. The most interesting example is Edgar database used agent commission Edgar Security and Exchange Commission (SEC) in U.S., reports to the current listing of companies.

4. Conclusions and future research

Traditional information technologies are useful but limited flexibility and the full financial and accounting information and thus may limit the remedies of the decision makers. In addition, no substantiation of economic decisions can help to assist the management of an organization. Today, it is mandatory to know the immediate needs, achieve rapid synthesis and analysis, preparation of decisions and the existence of tools and systems to provide various ancillary facilities. We believe that in order to address these in a manner beneficial research all these issues would require a more pronounced involvement and interest from professional accountants in adopting and using modern information technologies. In addition, we believe we should assist and opening wider horizons and perspectives that can offer smart modern technologies in the economic life through publications, articles and books that appear in the accounting, so that the public be informed about major opportunities they bring or create them. In this framework, we believe that exposure to what's new would increase dramatically, a situation that could help prevent the effects caused by a deep economic crisis.

There are many situations in which financial accounting information users are faced with complex, unstructured and undefined, which are sometimes impossible to solve by traditional computer systems. Under these conditions, the solution I suggest is to use and exploit the opportunities brought by the artificial intelligence and its related technologies. We can therefore say that intelligent systems in accounting are a necessity and an opportunity because of the advantages and benefits they create. However, modern systems and technologies can be extremely useful in making better decisions makers as they expand the ability of actors to better understand the organization and control activities within the scope of financial accounting. Through them, all knowledge can be used to solve complex problems.

We can not underestimate or overlook the benefits and implications of other technologies (which do not fall into the category of smart) that are useful and improve the flow of activities and that the company relied for a long time. But we believe that the future belongs to smart technology, able to act on behalf of the user (any level). In this context, the use of financial and accounting practice of intelligent systems is beneficial and can help pass more easily across delicate situations, such as those caused by an economic crisis. In addition, an organization can address needs in terms of efficient use of financial accounting information. Such systems can improve the quality of business decisions that management take, because they can provide summary information of better quality, obtained in a much shorter time. Now, consider that while XBRL is a mature technology, and together with increased understanding of the benefits it will bring substantial financial and accounting information users and business, will soon lead to an accelerated adoption. XBRL is now a global phenomenon: most of the initial concerns were reinforced by the idea of communication much easier for financial results to investors (or other users). Moreover, an economic crisis, such a technology manager or investor can provide the information it needs information that may prove useful in developing the most appropriate decision.

We believe that in coming years, this technology will revolutionize how information sharing within organizations, including our country, and by exploiting the potential of this standard,

organizations will be able to store and effectively manage the reporting documents. This technology provides a means by which to overcome communication barriers caused by incompatible software and information systems business, providing a common language that developers can distribute, allowing them to communicate directly with each other their results using Internet technology.

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