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FROM TRADITIONAL ACCOUNTING TO KNOWLEDGE BASED ACCOUNTING ORGANIZATIONS

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ABSTRACT: *Nowadays, we may observe that the rules of traditional economy have changed. The new economy – the knowledge based economy determine also major change in organizations resources, structure, strategic objectives, departments, accounting, goods. In our research we want to underline how the accounting rules, regulations and paradigms have changed to cope with political, economic and social challenges, as well as to the emergence of knowledge based organization. We also try to find out where Romanian accounting is on the hard road of evolution from traditional to knowledge based.*

KEY WORDS: *new accounting; green accounting; corporate governance; business intelligence; information technology; intangible assets and intellectual capital*

JEL CLASSIFICATION: *M21, M41*

1. ACCOUNTING PARADIGM TRANSFORMATION IN THE CONTEXT OF KNOWLEDGE-BASED ECONOMY

In the same time with change of economic paradigms, we can observe a major transformation also within the accounting field. This shift is reflected by growing the importance of intangible assets and intellectual capital within the new organization, in the information technology that is intended to generate new models of financial accounting recovery information, by emergence of a new vision on the accounting profession. In addition, the knowledge organization and the knowledge economy generate interdependencies between different research areas - accounting and ecology

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(Green Accounting), business intelligence, or corporate governance (corporate governance). Generated changes are highlight in Figure. 1.

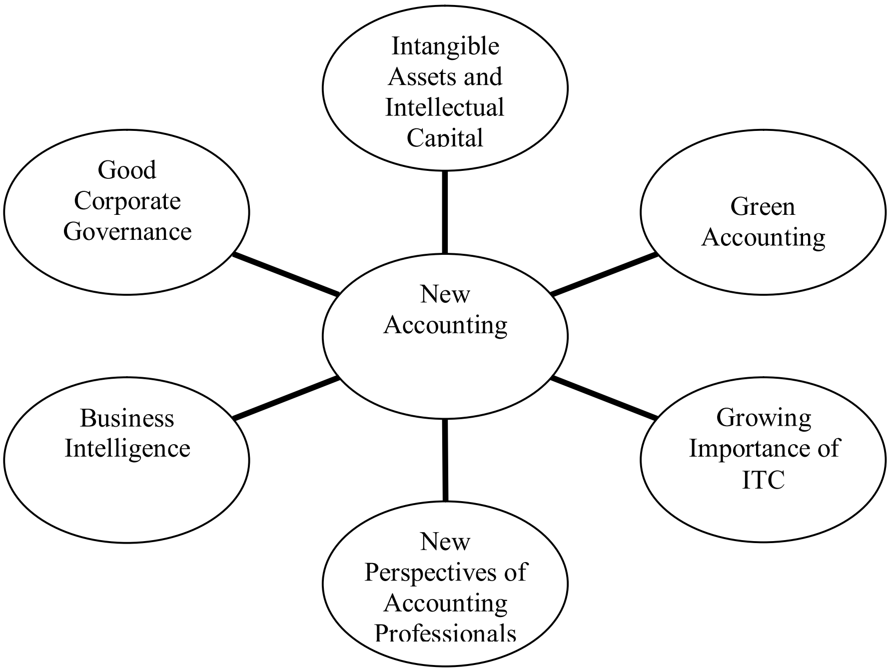

Figure 1. A new accounting prerequisite

2. INCREASING IMPORTANCE OF INTELLECTUAL CAPITAL AND INTANGIBLE GOODS

The essence of a person's capacity, an enterprise or a whole society to generate wealth primarily consists in the specific knowledge they possess. Referring to the reversing roles of the two categories of assets, material and immaterial, which was amplified in the modern economy, A. Toffler says: "what matters is not a company's buildings or equipment, but contracts and power marketing and its sales force, administration organizational ability and ideas that yeast in the minds of employee (Toffler, 1995). In these circumstances, the management has targeted companies' efforts to create and develop intangible assets in order to support the process of innovation through the achievement of R & D expenditure, resources allocation to train employees, etc. As a result, the market value of the enterprise is becoming increasingly influenced by intangible assets and by default intellectual capital that it owns.

The increasing importance of the intangible assets has led to a new perspective on traditional balance sheet, assets evaluation and added value generation. The growing of "dot com" areas has led to revaluation models and financial statements. In addition, it emphasizes the issue of documents registering and these operations category of assets reflecting into accountancy. Complex requirements of market economy based on knowledge involve products differentiation not only by appearance and functions but also in the terms of related services included in the package. Challenges of the new economy cause businesses to change their distribution system and internal organization as customers' requirements (Walters & Buchnanan, 2001).

The companies sell today equity resulted from good ideas and use capital raised to implement these ideas, and competition is currently mainly based on existing knowledge as intellectual capital (Persaud, 2001). The decisive role that the knowledge has concerning absolute all activities of state / nation clearly demonstrates that a country's economic future may depend decisively by knowledge (ACS, Carlsson, & Karlsson 1999) and by the ability to apply properly this knowledge. In fact, Michael Porter noted that the chief of a nation's competitive advantage lies in its ability to take the full advantage of the property related knowledge they have (Porter, 1990).

Property related knowledge of a company consists of employees' creativity, plus the technical and market related expertise (Halliday, 2001).Therefore, in the knowledge based economy, knowledge and creation, properly usage and re-usage of it are inextricably linked to increase of organization profit, which means gaining and maintaining competitive advantage. Conscious of the importance of knowledge-related assets, many companies have moved from the kind of centralized and hierarchical structure to a decentralized one, with multi-functional teams composed of individuals motivated by ownership they have in the companies (McGarvey, 2001).

Reluctance to calculate the value size of the intangible assets is explained by the difficulty and cost of implementing the available measurement procedures, but also to select indicators that are relevant under management facet. In turn, the reluctance to report the results of measurement of existing intangible assets arises from increased relativism in interpreting the values obtained, the risk of revealing aspects of companies' strictly internal matters and the lack of an established format of such reports.

3. GROWING IMPORTANCE OF THE INFORMATION TECHNOLOGY

In the knowledge-based economy, technology plays a leading role in the development of the economic potential (Persaud, 2001). The economic potential primarily depends on maximizing the use of intangible assets and requires stimulation of innovative and creative initiatives. Information is required to support such initiatives (Wickramasinghe N, Dag von LuBItz, 2007).

However, the information serves a dual purpose: reduce operating costs and stimulate new ideas and creativity. For example, the use of ERP management systems (Enterprise Resource Planning) enables organizations to reduce transaction and agency costs. This is possible now thanks to embedded computing systems specialized for certain specific tasks and activities that can be purchased in a very short time (Wickramasinghe, 2000).

Furthermore, information accessed by various modules of common services is a real support for the new innovative generation initiatives (Probst, Raub, & Romhardt, 2000, Shapiro & Verian, 1999). In addition, continuous collection and analysis of data and information resulting from the multitude of transactions along the supply chain is boosting the emergence of new ideas and the design and development of new products, processes and even new ways to meet the requirements.

Proven importance of information and communication technologies (ICT) in all areas of economic and financial activity has made its presence felt also in the frame of systems computer (CIS), as accompanying permanent accounting and financial audit of almost all entities. The companies' access to the Internet has led to commercial transactions based on the electronic data transmission - e-commerce - that in accounting field resulted in significant changes in recording, processing and storage information.

Information and communication technologies (ICT) have the greatest potential of all modern technologies, to encourage "dematerialization" of goods production and consumption "immaterial" because it allows the increase of adding value to products with lower consumption of resources and by reducing the environment pollution. The production "dematerialization" and the consumption growth of "intangible" goods signify major objectives of innovation and sustainable development. Traditional procedures for data collection and results interpretation are replaced in whole or in part, by computerized procedures (Haiduc, Andre, 2008).

In consequence, we notice a change; we would say historic, where the virtual equalizes reality and even overcomes it. It is noticed significant changes in registration processing and storing information in production, developing numerous computer applications in finance and accounting such as Ciel, Navision, SAP, Oracle, etc.

Development of electronic commerce brings a great challenge to the traditional business and accounting systems that they serve. The Internet will play an increasingly more important role in spreading of business and financial information. This changes the information international borders and raises expectations over on time delivery of updated information, fact that causes the bookkeeping opinion to be given on the entity's existing computer system, rather than on the financial statements data (Radu, 2002).

4. A NEW PERSPECTIVE FOR THE ACCOUNTING PROFESSIONALS

Due to the knowledge based economy changes, the management accounting is seen as a part of the management process. The accountants combine the financial and non- financial resources in order to achieve organizational objectives. The management accounting has evolved from the cost determination and financial control to the prediction and ascertaining of adding or creating value, to participate in decision making and organization strategy. The accountants have become part of strategic, visionary and creative staff who takes part in decision making with the company management body. The accountants play a new role in the knowledge-based organization (i.e. issuing the company strategy and policy, training, consulting), and exercise new skills, “they think as managers” and adopt “the management decision”.

The accountants professional associations in countries like: Austria, Canada, Italy, Malaysia, recognized the key role of accountants in the management process.

The future and the past of the companies, with business strategies and plans, measurement and control of information, organizational issues depend on the management accounting. This requires an innovative mindset of the accountants, a mix of the old and new roles and skills, targeting a new image, that of the accountant as advisor, who has knowledge of accounting, law and management (Radu, 2002).

Within the accounting, professional training should focus on three essential attributes: knowledge, ethics and professional values, and not least the professional skills. The general required knowledge refer to the management, information technology, the economy fields and the accounting and complementary areas (statistics, quantitative methods, tax, legal, auditing). The intellectual, interpersonal and communications skills are included in professional skills. The professional values should focus on the professional ethics and moral values.

Developing knowledge based economy cause accounting professionals associations to form alliances or networks. The reasons of this phenomenon are complex, including:

- Access to ideas and solutions to common problems;
- New information resources;
- Access to skills, knowledge and the other programs;
- Sharing the costs / benefits of research / services;
- Harmonization of standards;
- Protection against local or global competition exerted by other associations or alliances;
- Access to similar cases worldwide;
- Flexible business orientation.

Future accountants will have the opportunity to become a key resource in their organizations. They have to diversify their knowledge base beyond traditional financial analysis in order to be successful in the new trials, to new areas such as information technology, non-financial performance measurement and overall management. Leadership companies will expect more and more as financial and accounting departments to engage in strategic business development far beyond numbers.

5. ACCOUNTING AND BUSINESS INTELLIGENCE SOLUTIONS

Initially, companies appear, both for outsiders and for administration, as a "black box". Without a suitable model to streamline the black box internal systems and often complex, for observers and participants, it is not possible to achieve a strategic and targeted image on their decision.

Take the example of an investor. For investors, the company is a unit, which has the aim to generate maximum sustained profits. Before investing, could choose, assuming that there is an open capital market, the company to invest in. The decision difficulty lies in correctly assessing the strengths that a certain company has in comparison with other companies to transform the today investments into a future positive and high income in the form of dividend payments and growth in market share. The investor must understand the current business of “black box”, and how this activity will develop in a certain time, for example when he intends to hold shares (Lev, Daum, 2004).

The information system made to help is traditionally represented by the income statement and balance sheet, which are the published financial statements. The system of reporting and administration has been appropriate when companies operate on the cost efficiency and financial capital basis, on a relatively stable market dominated by the buyer. The income statement has contained adequate information on cost-effectiveness, by detailing production costs and overheads – the essential components of operational productivity in manufacturing companies.

In the frame of industrial economy due to the relatively stable market conditions compared with those of today, this information have led to reliable conclusions, reasonable regarding the future developments. In combination with the balance sheet, investors have received information about the effective use of material assets (such as machinery and equipment) and financial capital. All these have allowed the investor to make a relatively conservative assessment of the future company performance.

This comes in contrast to today's situation: the current results reported in the income statement and balance sheet say less and less about the future of the company. Determining a fair result with a period becomes increasingly difficult because of expenditure growth representing economic investment and affecting the income statement. In addition, on average, the balance sheet contains a small part of the fair value of the company, as balance sheet - market reports point to growing, despite the state of equity falling markets. The basic model reassessment of the company is needed when it has became obvious that the management and reporting tools have failed, in order to make possible to systematically build a new appropriate administration and management concept based on a newer and more accurate model.

In today's competitive climate is vital for organizations to provide quick access to information at low costs for large and various number of users. The solution to this problem could be the BI System (Business Intelligence), which provides a set of technologies and software products that deliver the information needed to users to answer the questions that are arising in solving business problems:

- The need of increasing the revenue and cutting the costs. Today, companies must have fast access to applications and provide users with quick and easy access at information that reflects the business environment changes. ID systems emphasize the information access and fast delivery to the users;
- The need of managing and modeling the current business environment complexity. Understanding and managing a complex business environment and maximizing the investment become more difficult. BI systems offer more than just query and reporting mechanisms, they provide tools to analyze complex information and data mining;
- The need of IT costs reducing. In today's economy, the information systems investment is a significant proportion of the companies' total expenses and need not only to reduce these costs, but also to obtain maximum benefit from the information managed by IT systems. New information technologies as Intranet and multi-level architecture reduce the cost of using BI systems by a wide variety of users, especially managers.

5.1. Green Accounting

Green accounting is a relatively new and dynamic area and is an attempt to identify and bring to light the exhaustible natural resources and the cost paid by companies. Green accounting aims to make the environmental costs more transparent through corporate accounting systems and reports, thus offering the best quantitative assessment (in both monetary terms and in physical units) of protecting the company costs and benefits from the environment activities, which it undertakes. This area involves identifying, assessing and allocating environmental costs, integration of these costs in the business plan, identifying environmental obligations, if any and, finally, communicating that information to the company shareholders as part of overall financial reports. Environmental reporting can be considered an umbrella term that describes the various ways in which companies publish information on their environmental activities (Alok Kumar et al, 2008).

In the traditional concept of economy and environment are two separate spheres, and improve one determines the cost incurred by the other. Unlike this in the nowadays economy the economists, ecologists researchers and managers, consider economy as a whole, comprising the all ecosystems in the world and most of environmental issues, including those not traded on markets, but that have economic value (Copperwinki).

Researchers Gray, Bebbington and Walter (1993) have defined ecology accounting in the following terms: "can be understood as covering all aspects of accounting that may be affected by the company response to environmental issues, including new areas of ecological accounting".

Economists Pătru V. Ciuraru - Andrea C., Luca M. (2008) perceive green accounting as "a process of identifying, calculating, monitoring, analyzing of the business-environment costs relationship reporting resulted from the prevention, confining and discharging the environmental green disasters, with a favorable impact on company and environment".

The link between accounting and ecology is obvious at three levels:

- The national accounting level (for example, calculation of gross domestic product and applying Generally Accepted Accounting Principles - GAAP)
- The financial accounting of enterprises (for example, reports used by lenders and Investors)
- The managerial accounting (decisions management).
- Traditional accounting methods do not take into account environmental costs and activities affecting the environment, while ecological methods include calculating environmental costs, as follows:
- Identification of environmental costs (expenses);
- Conventional calculation of environmental costs, with the objectives targeted to environmental costs reporting and harmful factors costs affecting the environment;
- Calculation of costs of losses, including: costs of prevention, protection costs, costs of material losses, costs of generating losses flow;

- Identification and Assessment of Ecological Obligations - cash flow reporting, which identifies and analyzes the total cost of both materials used and the flow generated by the loss of those, generated loss, material and energy use, efficiency in order to get a minimum loss level.

Environmental indicators and green accounting try to examine interactions between economy and environment. Environmental indicators and "green" accounting purposes are meant to reveal the path to sustainable development and to help understand the impact of policies, attitudes or simply contemporary lifestyles (Dachin).

The methodology of administration costs generated by relation between company and environment, facilitated by green accounting, covers two phases (Patru et al, 2008):

1. The first stage involves identifying, collecting, and controlling the costs generated by company-environment relationship and issuing of some development financial reports related to environment (reporting);
2. The second stage involves analyzing and interpreting data from financial reports related to environment. Based on these reports it will be made decisions on correction measures to be introduced, so that in future at least will be possible to reduce the costs of removing the economic damage, by guiding from the principle that "is easier to prevent than to treat".

5.2. Green Accounting Objectives

Among the main goals of ecological accounting, we can mention (Alok Kumar, 2008):

- reducing the organization responsibility and increasing the environment related transparency;
- recognition and attempt to minimize their negative effects of the conventional accounting practices on the environment;
- helping to negotiate the concept of environment and determine the relationship between the company and society on the whole, and particularly with the group of ecologists. It also helps the organization to seek to manage strategically together with shareholders this new facet;
- inducing a friendly picture, so companies can successfully attract funds from individuals and "green" groups;
- generating competitive advantages for companies producing "green" products and thus they can achieve a competitive advantage by making this public;
- separate recognition of environmental costs and conventional accounting systems revenues;
- taking dynamic actions to improve the conventional accounting practices effects on the environment;

- conceiving of new financial accounting systems and non-financial forms, information and control systems to encourage management to make more environmentally friendly decisions;
- developing new forms of performance measurement, reporting and evaluation, both for internal and external purposes;
- identifying, examining and trying to correct areas where conventional(financial) criteria and ecological are in conflict;
- experimenting the proceedings through which the renewal may be assessed and incorporated into conventional organizational practices.

6. GOOD CORPORATE GOVERNANCE

The concept of corporate governance can be defined, as "the process of making decisions and by which these decisions are implemented (or not implemented) (UNESCAP, 2007). The concept arose from the economy demand (in terms of corporate governance), and political science (as regards state governance) to have a general term to convey different meanings, which are not covered by the traditional term "government". It represents the pursuit of power or authority - political, economical, and administrative, etc. - to manage the resources and affairs of a country.

Another perspective depicts the corporate governance as a set of institutions and control mechanisms designed to protect the capital providers of a company, especially equity providers and the shareholders, being requisite to satisfy the requirements of other members. Market competition stimulates managers to use efficiently the capital, but only effective corporate governance can ensure that the shareholder interests are protected. Weak corporate governance slow the process of transforming savings into investment, increasing the risk those corporate assets to be ineffective used (Owen et al, 2006).

In the frame of new accounting, owing to the concept emphasis of future economic benefits generation based on the intangible assets and by default intellectual capital use, is the concept of *good corporate governance*.

A good corporate governance (GCG) inside the corporate environment leads to maximize legally, ethically, and on a sustained basis the shareholder profits, providing fairness and transparency to all shareholders - the company's customers, employees, investors, sales partners, territorial and regional government(Murthy, 2006). Good corporate governance is an essential condition to ensure the required values by each group of shareholders. It optimizes the corporate performances by creating an environment that motivates managers to maximize profit through investment, to ensure better operational efficiency and long-term productivity growth. As a result, these corporations generally attract the most talented people. Corporate governance also ensures the compliance of corporate interests with investors and company employees and management, creating a business environment based on honesty, transparency and responsibility (Oman, 2001).

Currently, in a complex and dynamic business climate, good corporate governance became a prerequisite demand for a long-term stability. Therefore, it should be cultivated and regularly practiced in the current business structure.

Corporations that genuine recognize and apply the principles of "good governance" will enjoy enormous benefits, by their availability and low cost of capital, will attract talented customers and business partners, will improve competitiveness and financial performance, and will sustain a long term growth. Moreover, the accounting will show, without doubt how to implement corporate governance where financial dissatisfaction and abuse of power lead to poor governance (Shil, 2008).

7. CONCLUSION - NEW ACCOUNTING IN ROMANIA

Romania cannot escape by economic development - moving to a new reality – a knowledge-based economy. However, unfortunately, most managers are at literacy and awareness level as regarding the economic development. Increased interest led by change of the accounting traditional economic paradigms obviously derived from the promised benefits.

Mainly, we are talking about creating added value due to predominant use of the intangible assets and intellectual capital according to environmental requirements, the emergence of new reliable raw materials in terms of prices, the use of accessible information solutions (business intelligence) intended to facilitate information flow so that all decisions to be taken based on regularly updated and real information. The world today has already been more than a century in a stage of increasing the information flow. Many successful businesses were based on accumulating knowledge, information capital, but only very recently, the economy as a whole has been changed by the information total reconfiguration.

We also can observe some steps forward from tradition accounting to knowledge based organization accounting. So, for reaching good corporate governance, we can mention the introduction of the Bucharest Stock Exchange (BSE) Code of Governance, January 2009. The Governance Code contains a set of recommendations on corporate conduct and ethics rules applied to companies admitted to trading on a regulated market. BSE Code was drafted along the lines of mature capital markets in order to increase communication and transparency of capital market in Romania and it came into force for the 2009 financial statements.

Another step forward can be considered the launch of XBRL- RO in December 2009 by CECCAR, The Body of Expert and Licensed Accountants of Romania. I-XBRL (eXtensible Business Reporting Language) is an informational tool used by some of most important International Accounting Normalization Boards (IASB, FASB) for standardize financial reporting, increase transparency and improve the quality and comparability of financial data. In addition, of i-XBRL, there are many products on the Romanian market for performance management. Of these, we can mention international software like Microsoft BI, SAP Business Objects Edge BI, Oracle BI, etc., but also some Romanian products like CRIsoft Romanian - CROS, Bit Software - Socrate TotalSoft - Charisma Analyzer, etc.

Unfortunately, in terms of green accounting, neither company law, nor accounting rules issued by the Ministry of Public Finance of Romania does recommend environmental transparency rules for financial reporting. Therefore, we cannot talk about a green culture in Romania.

We may clearly observe that Romania is only at the beginning of the road to a knowledge based organization accounting. To be able to pass to a knowledge based accounting it would be required an actively involvement of a wide range of stakeholders with crucial roles in political, economic and social development, including tax and accounting regulators as the Body of Expert and Licensed Accountants of Romania (CECCAR), the Chamber of Auditors, academic institutes, financial and credit institutions, software companies and other organizations that have a primary role in defining internal and external reporting taxonomies and guidance.

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