ISSUES CONCERNING THE USE OF SOCIAL AND ENVIRONMENTAL INDICATORS FOR PERFORMANCE MANAGEMENT

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***Abstract**: The sustainable development of any economic entity and the economy as a whole is subject to managing overall performance. Appropriate performance management requires the use of specific tools that can give managers the information they need for decision making. Using the classic indicators of performance assessment must be supplemented by indicators that reflect value creation, and the performance obtained in the social and environmental fields. Social and environmental indicators are designed to provide an insight in the results of these areas that are so sensitive today. The paper aims to show how social and environmental indicators can be integrated into overall performance management.*

***Key words**:* performance; performance management; social indicators; environmental indicators.

JEL Classification Codes: O44, Q01, M41.

1. INTRODUCTION

Achieving social and environmental performance is not only done by periodic measurement, but also through the active involvement of the management of an economic entity, and by achieving a true type of performance management. Social and environmental policies can be found today in more and more entities from different industries and economic sectors. Adopting these policies occurred either voluntarily, or as a result of the increasingly stricter provisions in the legislation.

When, and as long as it is properly organized, accounting can, as a tool of management, provide useful information for decision making. Accounting and management are difficult to distinguish in a strict manner, as between them there is a relationship of mutual determination: management takes decisions based on the information provided by accounting, and accounting or bookkeeping is organized and managed to meet, among other things, the needs of management. In recent decades, accounting has evolved to meet the expectations of management in the new context. Thus, there appeared environmental accounting and social accounting.

Implementation of social accounting and environmental accounting at enterprise level can bring about image gains that are often neglected, but in reality have significant effects on future economic and financial performance (Țaicu and Dumitru, 2013). Thus, a company that focuses on social and environmental issues achieves a better image in its relationship with the customers (with favourable effects on the level of sales), with the employees (it shows concern for reducing pollution in the workplace and providing better working conditions, thus attracting better trained employees), with the local communities, the environmental organizations, the creditors.

In this paper, empirical-analytical methods were used to present the past and current context in the field of company performance management and evaluation. This presentation was followed by own interpretations, aiming to provide a possible solution for the use of social and environmental indicators in performance management at company level. A theoretical perspective was used to describe the main concepts presented in the scientific literature and to propose solutions.

2. A COMPANY'S PERFORMANCE IN THE CURRENT CONTEXT

Business performance is a multi-faceted concept, and the research in this field is being undertaken by academics from a wide variety of disciplines (Neely, 1999). Measuring organization performance should not be an end in itself, but rather a tool for more effective management. According to Amaratunga & Baldry (2002), in order to make effective use of its performance measurement outcomes, every organisation should be able to make transition from measurement to management.

The performance measurement systems provide a basis for determining the appropriate efforts in the overall balance and for communicating such efforts through management control.

Since the last decades of the twentieth century, we witnessed an evolution of company performance measurement system. Today, performance is appreciated not only on the basis of economic and financial indicators but also on indicators that reflect the company relationship with the environment and society.

A study conducted by Mavrinac & Siesfeld (1998) showed, nearly 20 years ago, that "non-financial factors can be used as leading indicators of future financial performance". This is one of the first studies that provided quantitative evidence of the value impact and relevance of non-financial aspects in the activity of companies and enterprises.

3. RELATIONSHIP BETWEEN INFORMATION SYSTEMS AND MANAGEMENT

Management information systems transmit information on:

- Performance in both the enterprise level and detailed for each organizational division, and by products;
- The way resources were used;
- Work productivity;
- Satisfaction of employees, etc.

A managerial system transmits decisions on:

- Organizing the information system;
- Optimizing the use of resources;
- Reducing the negative environmental impact;
- Improving the relationship with society.

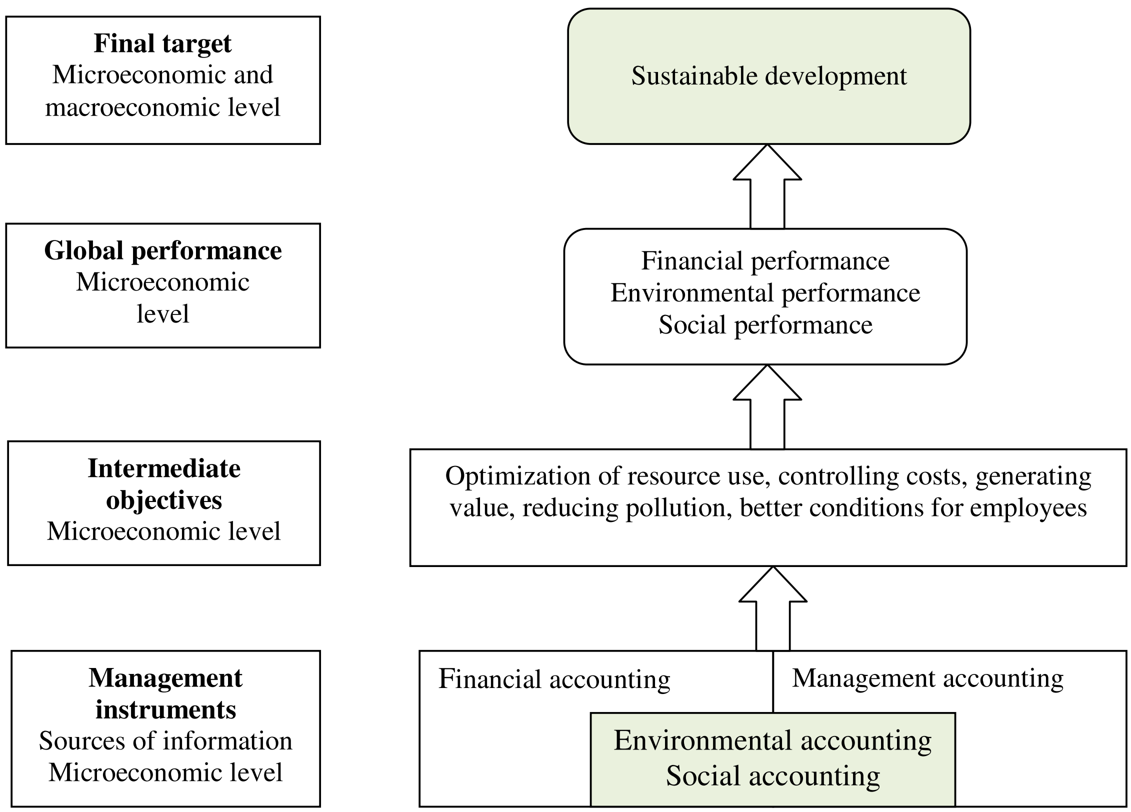
The information provided by the accounting information system is used both in the process of adopting current decisions, and in grounding the strategies of the company, which confirms the importance of, and need for information that is better processed in terms of quantity, and also timely and adequate in terms of being full operational in time.

Mehedințu et al. (2012) shows that "traditionally, in an organizational context, Performance Management can be approached at three levels: strategic, operational and individual".

Creating a modern and high performance management involves pursuing the results at both the level of the enterprise, and for each activity conducted in the lower hierarchical levels, and in this context, finding and defining methods and techniques for quantifying, measuring and controlling the results management of each department, are key issues. In solving this problem management accounting and cost calculation have an important role, as means used by managers for information, for knowing and controlling the production process.

The complexity of economic life, the financial and economic crisis facing the world economy, and the increasing social and environmental issues constantly strengthen the role of information in business, in the economic and financial fields, in the social field, and in making environmental decisions. Efficient management of any business units is based on the existence of a well-structured information system, in keeping with the information needs of the managers, and accounting is the main component of this system.

Implementation of social and environmental accounting at company level provides performance management tools aimed at achieving sustainable development, as seen in figure 1.



Source: authors' own work

Figure 1. Social and environmental accounting as management instruments of firm performance

4. TYPES OF INDICATORS AND THE LIMITS OF THEIR USE

The performance is measured through the collection of data in terms of key performance indicators (KPI), key success factors (KSF), critical success factors (CSF) or key performance factors (KPF).

Various *frameworks* can be found in the literature, which provide sets of performance indicators, but a manager can be faced with many questions, including: What is it that makes an indicator to be a "key" indicator? What kind of information should each indicator provide? How many "key" indicators should be selected, and on what criteria should we choose them?

There is a diversity of issues, and consequently of indicators, which can be relevant and representative of various sectors or companies. For example, in the petroleum industry, *exploration success rate, volume of proven and probable reserves* or *refinery capacity*, while in retail, the important indicators can refer to *expected return on new stores* or *sales per unit area* (i.e., per square metre).

The risks regarding the use of cost information can be tracked on the logic of their obtaining (Țaicu et al, 2013). In the same manner, we consider that the risks regarding the use of indicators are: manager's involvement, design of information systems, method of determination, ethics of company specialists, accounting errors and misinterpretation of information.

5. RECENT DEVELOPMENTS IN TRIPLE BOTTOM LINE REPORTING

The Triple Bottom Line concept was developed by John Elkington in 1994, and changed the way the performance of projects or policies adopted by enterprises is measured. It was an important step towards including social and environmental issues along with economic ones in company reporting, being supported by the Global Reporting Initiative and numerous management consulting companies.

According to Mitchell et al. (2012), there is now pressure on all organisations "to incorporate a vision for sustainability as part of its core business, and to be accountable for how they pursue that vision".

The triple bottom line (TBL) consists of three Ps: profit, people and planet, and it aims to measure the financial, social and environmental performance of the corporation over a given period of time (figure 2).

In 2009, an article in The Economist stated that "one problem with the triple bottom line is that the three separate accounts cannot easily be added up. It is difficult to measure the planet and people accounts in the same terms as profits – that is, in terms of cash".

Source: hatchnola.com

Figure 2. The Triple Bottom Line dimensions, or the 3P: People, Planet, Profit

The company is pressed by several actors to adopt a sustainable development strategy:

- The state can impose legal provisions in environmental and social issues, environmental taxes with impact of company`s financial results;

- Shareholders demand an increase of company financial performance but also an increase of company value;
- Competitors can faster implement new and clean technologies obtaining a better image and a better position on the market;
- Clients calls for standards-compliant products and usually prefer eco-friendly companies;
- Local community and ecologist organizations demand for elimination of the negative environmental effects of the activity pursued by the company;
- Mass media presents positive and negative aspects of environmental policy and social life, thus the company's image towards consumers.

One can note in the economic reality in recent time that more and more businesses have started to publish information on their actions in the social field and in the field of environmental protection, including those in Romania, and this trend must be seen as one of the best practices.

European Union adopted sustainable development as a fundamental objective in 1997 when it was included in the Treaty of Amsterdam. In Romania, the first national sustainable development strategy was drafted in the years 1997-1999 with assistance from the United Nations. The current strategy, adopted in 2008, aims the following horizons:

- ✓ "*Horizon 2013: To incorporate the principles and practices of sustainable development in all the programmes and public policies of Romania as an EU Member State.*
- ✓ *Horizon 2020: To reach the current average level of the EU countries for the main indicators of sustainable development.*
- ✓ *Horizon 2030: To get signifi cantly close to the average performance of the EU Member States in that year in terms of sustainable development indicators*" (Government of Romania and United Nations Development Programme, 2008).

6. QUALITY CRITERIA IN SELECTING INDICATORS

For performance monitoring and reporting, economic theory and practice developed a number of models such as the dashboard, balanced scorecard, reporting. Each of the indicators that make up such a model is chosen so as to measure an aspect of the business that is crucial for success. The totality of the indicators included in the dashboard/balanced scorecard provides an overview of the functioning of the business. Before establishing key performance indicators it is recommended to make an analysis of the relationship between these indicators and key success factors.

Selecting and choosing indicators are directly related to the specification of the key points of the company. To ensure the success of this action, it is necessary to associate each item with one or more indicators that are suitable, given the nature and limits of the decisions that can be taken. Key performance indicators allow to measure the performance achieved, and further on facilitate the adoption of appropriate management decisions, thus enabling more effective management, which can ensure a process of continuous improvement of the work of the enterprise.

The mission of the company indicates the reasons for its existence, and by defining it the *raison d'être* of the company is established, i.e. for what/whom it exists and what its ultimate goal is. The vision of the company indicates what it wishes to obtain. It also contains a set of standards, values and principles that guide the work of the enterprise.

The critical success factors are those attributes that lead to success. A critical success factor is one in which the organization must excel in order to ensure its durability, or which is essential for achieving performance, and also for the competitive advantage of the company.

As stated by authors Artley and S. W. Stroh (2001), key performance indicators are formed from a number and unit of measure: the number gives us a magnitude (how much), while the measurement unit provides the number with meaning (the answer to the question why?). The nature of these indicators varies from one organization to the next depending on its mission and its purpose. A company can use indicators such as gross profit or turnover, while an educational institution can use the percentage of graduates who are employed in the field of their degree, and a non-profit organization in charge of social assistance will take the number of people assisted. P. Voyer (2006, p. 49) believes that "identifying measure indicators must be an integral part of the planning of the organization, complementing the setting of the goals and organizing activities through a frame of reference for measuring the organization's expectations and tracking them".

It is necessary to make a clear distinction between, on the one hand, the concepts of information and indicator, and on the other hand, between performance indicators and piloting indicators. Information is a measure of a phenomenon in the field, while the indicator is the result of a mathematical calculation.

Indicators contribute to assessing a situation by a decision-maker, and therefore the calculated values are important indicators for the enterprise only in relation to its objectives. Performance indicators measure the level of performance achieved, while piloting indicators determine the level of progress of the action plan. The link between the two categories of indicators is close and, from this point of view, the dashboard becomes a work instrument.

According to United Nations (2008), "the following quality criteria should be taken into account in selecting indicators that meet the common needs of a wide range of users of corporate responsibility reporting:

- Comparability;
- Relevance and materiality;
- Understandability; and
- Reliability and verifiability".

To be useful in management, a good, relevant indicator must have the very qualities of a measuring instrument: reliability, sensitivity and simplicity. It is possible that no indicator may reflect, in a perfect manner, the evolution of a critical success factor, in which case it is necessary to use several indicators to give a close image of the developments. Industrial enterprises that conduct a complex activity must contain three sets of indicators: technical, economic and human.

In recent decades we have witnessed the explosive development of computers and IT that can be used for things like collection and processing of data and performance management. Specialized studies "confirmed that ICT provides a whole new set of ethical challenges" (Pólkowski, 2015).

An indicator cannot be either perfect or exhaustive. Any indicator reflects only a part of reality, and in order to have a general picture of things, an overview, the manager must use a set of indicators. We must bear in mind that an indicator is interpreted differently by different groups of users.

6. EXAMPLES OF DECISIONS BASED ON SOCIAL AND ENVIRONMENTAL INDICATORS

There may be more than one possible courses of action in a given situation . To take a decision it is necessary to conduct a quantitative and qualitative analysis. The quantitative factors influencing decisions are expressed as numbers, and can be financial and non-financial factors. Qualitative factors are difficult to assess in numerical form.

In Table 1 and Table 2 we present some examples of managerial decisions that may be taken based on environmental and social indicators.

Table 1. Examples of decisions taken on the basis of environmental indicators

No.	Environmental indicators	Managerial decisions
1	Incomes from recycling	Looking for new customers for recyclables Recycling other materials
2	Costs arising from pollution prevention	Technological updating
3	Costs arising from processing, transportation and disposal of waste	Technology change Redesign / Rethinking products
4	Number of environmental incidents	Staff training Changing technology
5	Level of emissions to the atmosphere	Changing technology
6	Amount of waste in special warehouses	Building new warehouses

Source: authors' own work

Table 2. Examples of decisions taken on the basis of social indicators

No.	Social indicators	Managerial decisions
1	Number of occupational accidents	Staff training Changing technology
2	Number / value of social projects	Increasing / reducing costs
3	Level of employee satisfaction	Improving working conditions Wage rises
4	Level of generated noise Level of noise generated	Changing technology
5	Expenses for staff training/year/employee	Increasing / reducing costs
6	Average number of staff training hours/year/employee	Measures for optimal employee training

Source: authors' own work

7. CONCLUSIONS

An enterprise whose business is based on a sustainable business model must pursue and track, in time, the correlation of those strategies that bring it a competitive advantage, the end result being an increase in its overall performance.

A single indicator cannot reflect the true performance of the company, since performance is a complex concept with several sides. Each indicator has its advantages and disadvantages. To conduct a proper assessment of performance, enterprises or firms must use a set of indicators designed to capture performance in all its manifestations.

In Romania, there is a legal framework that allows and encourages the organization of genuine social and environmental accounting at enterprise level. Enterprises or businesses have greater freedom in organizing social accounting and environmental accounting as part of management accounting rather than of financial accounting. The claim is based on the specifics of each of the two types of accounting. Implementation of social and environmental accounting should be seen as a means to achieve overall performance, and is just one of the actions that make up performance management.

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