

The Measurement of Economic Entities Performance from the Non-Financial Indicators' Perspective

Delia – Mihaela Ibanisteanu (Ionasz)¹

Abstract: Since the financial performance was on the first rank in the past, nowadays the economic entities are increasingly aware that it only offers them the consequence of the analysis of financial indicators. There is tackled a new given value of performance, namely **the global performance**, taking into account the extension to social and environmental indicators. The success of an entity involves assembling economic, social and environmental performance. Most economic entities aspire to success because the performance management has become a work process not only useful but also mandatory, and it couldn't have achieved the desired success without a proper management. In this situation **the performance assessment** represents the basic element. © 20XX EAI. All rights reserved.

Keywords: economic and financial performance; social performance; environmental performance; overall performance; non-financial indicators; performance measurement

JEL Classification: M41

1. Introduction

The performance illustrates all the fundamental stages of business development, from intention to result (Lebas, 1995) that cannot be taken separately: neither the result nor the performance achieved. The methods and activities by which they were obtained, as applied with a well-established purpose before achieving the desired success, have no meaning if the assessment is singularly taken into account. In other words, if performance cannot be evaluated, it cannot be verified either.

Otherwise performance has to face two essential processes: management and performance measurement. Performance management is the process that encompasses everything while addressing any economic, social and environmental issues and highlights the combinations between the economic entity and its performance, integrating processes such as: strategy determination, strategy creation, initiation process and performance measurement.

¹ PhD Candidate, "Valahia" University of Targoviste, Romania, Address: Targoviste, Romania, Address: 13 Aleea Sinaia Street, 130004 Targoviste, Romania, Corresponding author: delia.ionasz@yahoo.de.

Performance measurement (Figure 1) aims to assess the results, while performance management includes the decision-making process based on the measurement results to obtain the desired performance. Performance measurement is the essence in supporting the performance management system, enabling the understanding, management and correction of the results obtained by measurement. Economic entities, as a whole, aspire to performance, and therefore performance management has become a necessary and indispensable tool, which shows us that performance needs to be monitored and also managed, as we cannot speak about performance without efficient management. The element of success through which efficient management is achieved is evaluation.

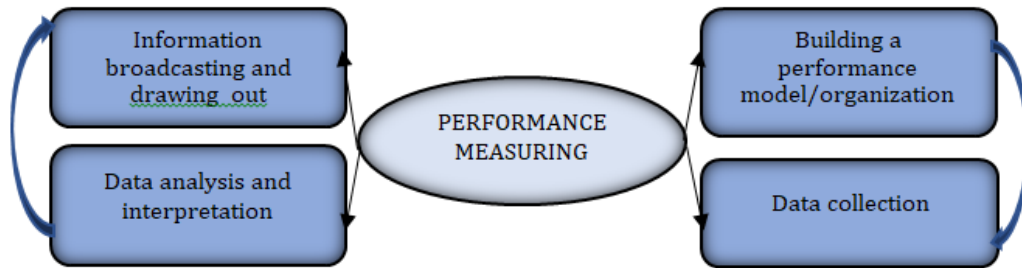


Figure 1. Model of Performance Measurement

Own source

As it can be seen in the **figure 2**, we absolutely need a system of relationship between performance indicators and performance management that helps the performance assessment.

The performance management exists and will always be closely related to the measurement of spiral-like performance, forming the necessary conjuncture to achieve it.

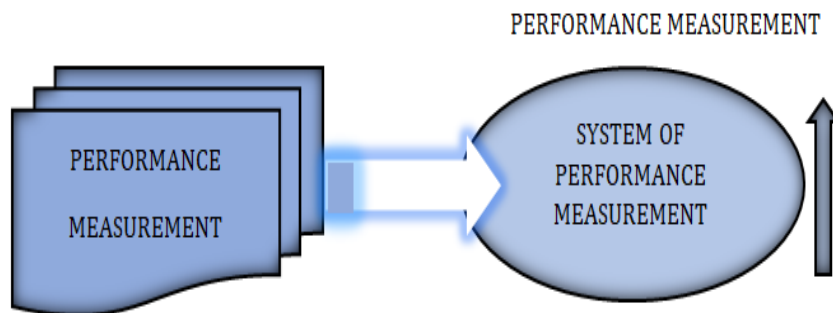


Figure 2. The Relationship between Performance Indicators and Performance Management

Own source

Considering the above, we absolutely need a system of indicators to assess and improve the performance of an entity. This can be accomplished by conducting and creating a new area of research that highlights how these performance measurement models are evolving, leading to considerable improvements.

2. Literature Review

The general idea about non-financial indicators reflecting reality for measuring performance is associated with the balanced dashboard, which was developed by Kaplan R.S. and Norton D.P. in 1992, elaborated on four axes such as: investor satisfaction, customer satisfaction, quality of internal processes, capacity of development and innovation of the *entity*, (Kaplan & Norton, 1992) entity, in order to optimize the decision-making process by managers, to have a brief vision on financial and non-financial indicators that are of particular importance for the objectives they have in mind.

Although people talk about global performance, which incorporates economic, social and environmental aspects, there is no reliable formula to calculate its determination. Taking into account all the reported aspects, it is a priority to implement a system of performance indicators by combining financial and non-financial indicators for measuring and evaluating the performance of any entity.

Currently, there are numerous performance evaluation models, of which we can list: the EFQM model (European Foundation for Quality Management, 1999), the Malcolm Baldrige model of excellence and the Balance Scorecard (Popa, 2009, p. 13), such as exceptional models that consider different aspects. The general ideas, the foundations of excellence, reflect the conceptual basis (as illustrated in **Figure no. 3**) indispensable for the acquisition of sustainable excellence by any entity. These can be used as a basis for presenting the characteristics of a culture, of a group focused on the creation of excellent skills. At the same time, they are used as a common essential language for the top management teams of the entity.

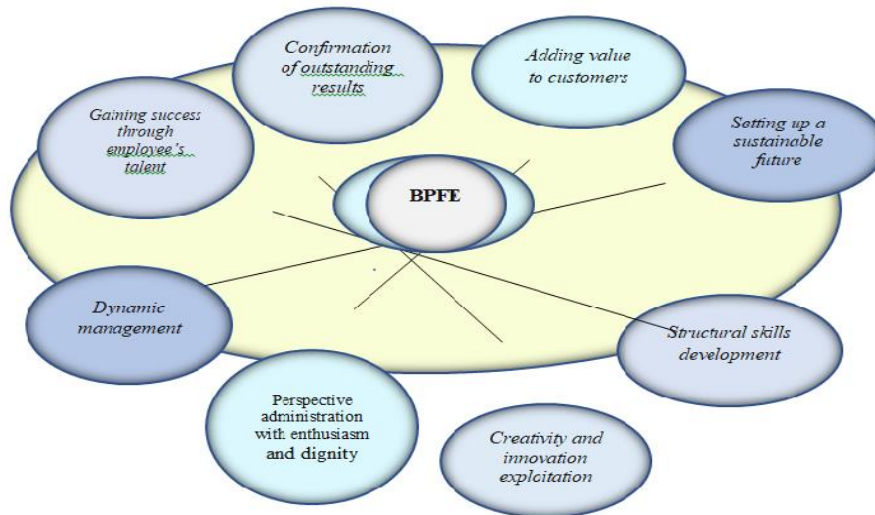


Figure 3. The Conceptual Basis of the Fundamental Principles of Excellence
Own source

The principles of the EFQM Model of Excellence (as it can be seen in **Figure 4**) allow entity's managers to understand the cause-effect connections between what the entity does and the results it obtains. An entity needs strong managerial coordination and clear and precise strategic direction to achieve sustainable success.

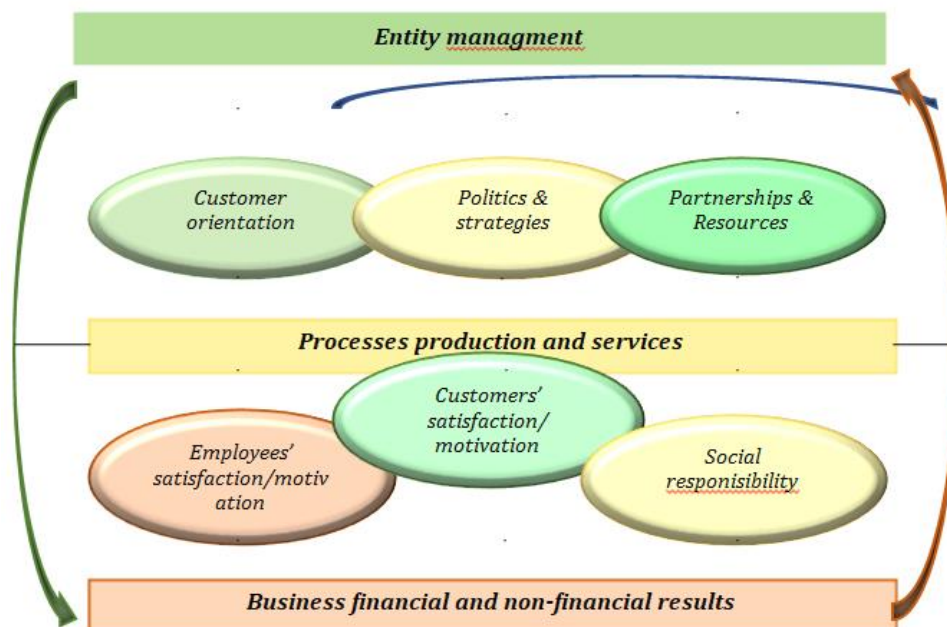


Figure 4. Evaluation Principles for Achieving Excellence

Own source adapted after, EFQM Model of Excellence, Arco Iris, Caso Practico y Respuesta Modelo, European Foundation for Quality Management, 1999.

3. The Research Metodology

The study adopted the form of „observation-deduction” reasoning, trying to draw a conclusion based on existing theories and studies in the field and continuing with empirical investigations based on an opinion poll and a content analysis of reports, financial as well as non-financial statements published by selected Romanian economic entities.

As related to the specifics and characteristics of the research platform and the idea that „a research that will be maintained over time proving its value admits a perfect combination of research methods to achieve the objectives” the qualitative research and the quantitative one were combined throughout the paper.

The sustained research has guided the knowledge of the theoretical aspects related to the deadlocked entities and their readjustment preferences. The theoretical information was provided by reading a relevant number of specialized papers, both from Romanian literature and from foreign literature.

All the information gathered and the opinions resulting from the theoretical information led to the creation of an empirical research, using quantitative methods that contributed to the validation of the hypotheses. The research technique used the method of re-examining the literature from the specific country and abroad, the analysis of all documentary materials, reports and legislation prepared by countless institutions, comments and explanations of specialists, as well as a wide range of published materials. As **research methods** used, the present study is based on the data collection method, the comparative method, the discourse analysis, the questionnaire and the case study.

4. The Identification and Interpretation of Economic-Financial and Non-Financial Indicators

The financial and non-financial indicators used by Romanian economic entities are of a significant variety. The widest variety has classical and modern indicators (of which a remarkable role is played by value-creating indicators). However, more and more analysts are turning to a new type of indicators, namely non-financial ones, which define much better the performance of economic entities because they directly affect the important points of the entity (e.g. quality of management and intellectual assets). Financial indicators retain a privileged historical place in the determination of investment decisions.

The current global economic environment, through its specific components, enforces the new performance standards that advance the economic sphere on economic entities. Regarding the macroeconomic developments, we consider that ignoring the social and environmental aspects may cause losses to economic entities, especially large multinational corporations, losses that can be materialized in: reduction of market shares, turnover and customers, as well as in various costs of greening. In the corporate environment, financial indicators remain the basic management tool that expresses profitability on the capital market. The opponents of this approach insinuate that it inspires management to take a series of increasing actions on a short term inflicting the long-term investments.

The indicators recommended in the form of reports and calculated on the basis of accounting and financial information allow the formulation of conclusions on the economic and financial condition of the economic entity. With their help one can emphasize the financial power, the way of managing the capitals, the profit of the activity, the state of financial stability or instability, the economic and financial profitability, etc. The value of using indicators in an analysis lies in the fact that they allow the analyst to assess past performance, to assess the current financial situation of the company and to obtain useful perspectives for estimating future results.

The non-financial indicators (**Figure 5**), depending on the accurate nature of the production process, could include the following: indicators arising from time and movement studies; production line efficiency; the ability to change the production plan when changes occur in the marketing plan; production line reliability; minimizing waste production; ability to produce in relation to the marketing plan; product life cycle.

<p>Indicators regarding the production quality control</p>	<p>1. scraps measurement; tests for components, subassemblies and finished products ; analysis of manufacturing/production flaws; "the most likely reasons" of productions failures; actual failure rates vs. target failure rates; complaints regarding the quality assurance of the testing program ; failures/ annual scraps as a percentage of the sales value ;failures/scraps as a percentage of the delivered units; various indicators measuring the quality of the product/service; various indicators measuring the reliability of the product/service. Indicators regarding the relations of the procurement department with the suppliers: inventory levels and the delivery schedule; control measures backed up by the "just in time" inventory; stock turnover rate; supplier delivery performance; registration of the delivery services of the whole amount of demands provided on time; percentage of deliveries with flaws.</p>
<p>Indicators of the products/ service delivery</p>	<p>1. Deliveries vs. the date of the order/demand registration; average days of delivery delay; the necessary time for an advertisement/promotional offer to generate the first demand . Sales and marketing applying the method: " staying close to the customer"; user guide complaints; the packaging quality;the client's satisfaction analysis; products prices comparison; checking unsatisfactory visit reports; monitoring the sales frequently lost by individual sellers; analysis of sales commissions; orders monitoring process; sales/100 clients ; sales analysis by products line; by geographical area; by customer;by seller; matching the sales orders (orders) with deliveries - mismatch trend; analysis of the outstanding orders; analysis of basic orders and sales commissions; the achieved market share as compared to that of the competition; launch analysis of a new product /service; delays in delivery to the clients (commercial fund).</p>
<p>Human resources</p>	<p>1. control of employed personnel; the responsibility of the employed staff ; the analysis of the business mix versus the need for the human capital; qualified personnel versus unqualified personnel; own workforce versus the staff hired from outside the company; workload/ activity analysis; staff turnover; staff turnover versus local economy; personnel morale;the cost of recruitment; number of applications/ advertisement; personnel evaluation techniques; monitoring specific departments, such as: Accounting; long term monitoring of departments' performances ; reports accuracy.</p>
<p>Research and development</p>	<p>1. Evaluation versus basic R&D objectives and strategic objectives; product improvement related to potential market acceptance; priority of research and development versus other projects . R&D versus competition; prototype failure rate. <u>Work environment</u>; standard work environment; cleaning order; other facilities compared to the competition.</p>

Figure 5. Content of Non-Financial Indicators

Own source

The Financial and non-financial indicators are those that admit an overview of the entity, analyzing and discovering deviations and adopting decisions in order to implement the strategies developed by economic entities. There are many indicators that can be used (financial, entity-compliance procedures, training, recognition of employee performance, etc., process-stock rotation, efficiency of

equipment, on-time delivery, etc.), but there must be chosen those that outline accurately the activity of the economic entity.

4.1. Non-Financial Performance Indicators

The non-financial indicators reflect an important part of an economic entity's performance. The success of an entity is the team itself, but this success must also be supported by a human resources policy aligned with the business strategy. The connection of strategic objectives with performance, the performance monitoring process through indicators and their realization have always represented the crucial challenge of any economic entity.

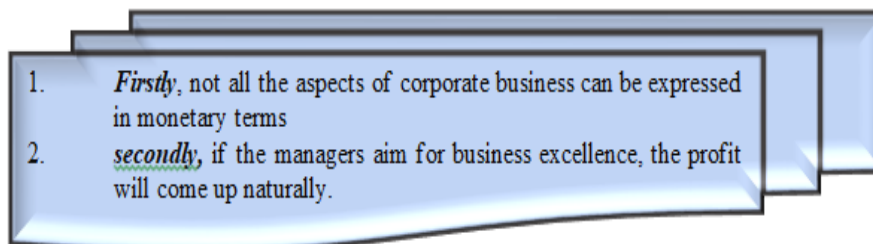
Performance indicators help to quantify the outcome, by providing visibility in relation to the performance of individuals, teams, departments and organizations, and allowing those with decision-making power to take action the goal achievement. In the financial management and operational accounting, there is a close connection between the level of customer satisfaction and the future performance of economic entities.

Therefore, it is time for managers to realize the importance of measuring performance from a non-financial perspective. The research done to support this approach has aimed at getting the effects of long duration and intensity: "if you understand a business means less, then you give importance only to accounting figures" and "if you understand operations better, then you realize that non-financial indicators could be a valuable aid that leads to a highly efficient management" or "graphs that have incorporated more information than the figures for the manager who also takes into account the non-financial approach" (Ogunsiji & Ladanu, 2017, p. 356).

Managers are willing to avoid the use of a varied set of indicators with a high difficult grade of being drawn up and even correlated. Most people have a dominant preference for the use of single performance indicators, which are well tested and produce seemingly uncertainty-free information. However the global economic situation underlies the fact that diversified indicators are useful because of the progressive complexity of the activity of economic entities.

Spreading information to decision makers, by comparing exclusively financial indicators means to provide a set of inconsistent indicators that do not honor responsible managers or stakeholders.

The corporate process must be viewed in two ways:

- 
1. *Firstly*, not all the aspects of corporate business can be expressed in monetary terms
 2. *secondly*, if the managers aim for business excellence, the profit will come up naturally.

Financial indicators refer to the following functions: manufacturing and production; sales and marketing; human resources; research and development; working environment.

Whether the entity is a manufacturer or a service provider, in order to be successful, its managers should ensure that: products move constantly and quickly through the production cycle; repair warranties are kept to a minimum and their rotation speed is high; supplier delivery performance is constantly monitored; quality standards are continuously raised; sales orders, shipments and outstanding orders are kept to a minimum; overall customer satisfaction is good; turnover statistics are produced in such a way as to facilitate weaknesses in the management process; costs with the research and development department have not escalated; the accounting and finance departments really understand the business.

4.2. The Need to Expand the Use of Non - Financial Performance Indicators

As a first useful condition for improving and achieving business excellence is set the development and introduction of a system for measuring the performance of economic entities. Afterwards, Professor Robert Kaplan, 2003, from Harvard Business School states that: "Every entity must develop and transmit performance measurement models highlighting its unique strategy" (Kaplan & Anderson, 2003).

The problems the traditional performance measurement systems are conflicted with, focused only on financial indicators such as profit, turnover, etc., have led to the development of models for measuring non-financial performance.

Performance indicators are those indicators by which the limit of certain requirements can be assessed. Performance indicators can be precisely established so that any "information that individually or collectively helps an actor to lead the course of an action in order to achieve an objective that allows him to evaluate an outcome" (Popa, 2005, p. 5).

In these circumstances, approaching this issue demonstrates its greater role as the world economy has recently been hit by an intense crisis, with a major influence at the level of all states. Due to shortcomings in traditional performance measurement

systems, the practitioners, consultants and researchers have allocated significant resources and effort to rethink them. Thus, the period after 1990, as referring to performance measurement, is individualized by the awareness of the imperative update and improvement of the performance measurement models at the previously occurred entity level. The need of performance measuring results from its five essential attributes (Lohman et al, 2004, p. 267-286) (**Figure 6**):

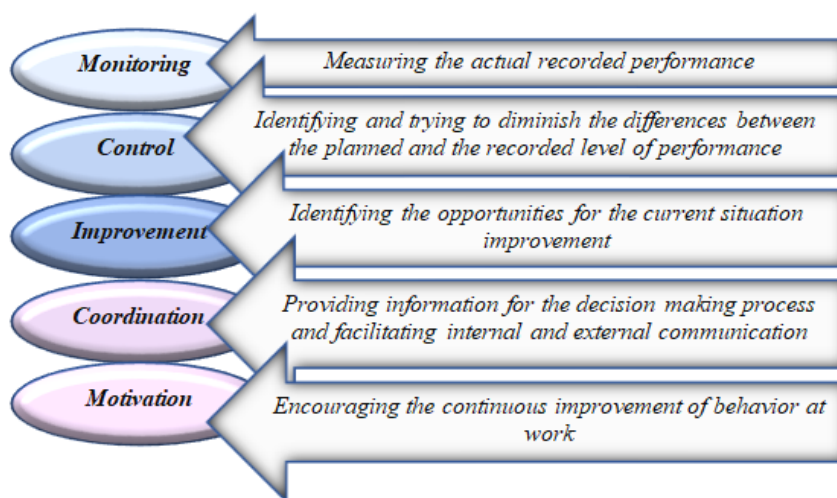


Figure 6. Necessary Items for Performance Measurement

Own source

The key points for solving the problems of economic and corporate governance entities were limited to monitoring and expanding the use of performance indicators. The extension of non-financial indicators' usage as well as of their importance in choosing the specific direction to improving the economic entities' performance, highlights the need to adjust Romanian management and professional accountants with various tools for evaluating economic entities and the need to forecast, plan and control economic processes.

From time to time, this relevant information needs to be presented through a balanced and complete view of the evolution of the results. Entities should be careful to disclose relevant information about the environment and how current and foreseeable issues they face could jeopardize the entity's performance, results or position, hence the need to use and extend non-financial indicators. (**Figure 7**).

Considering this information, the need and extension of non-financial key performance indicators (KPIs) is becoming even more important. Entities have the opportunity to disclose relevant information based on the methodologies established by the indicated legislation. The annexes to Commission Recommendation 2013/179 / EU containing procedures related to the

environmental, product and environmental characteristics of the entities they operate for, may serve as a model.

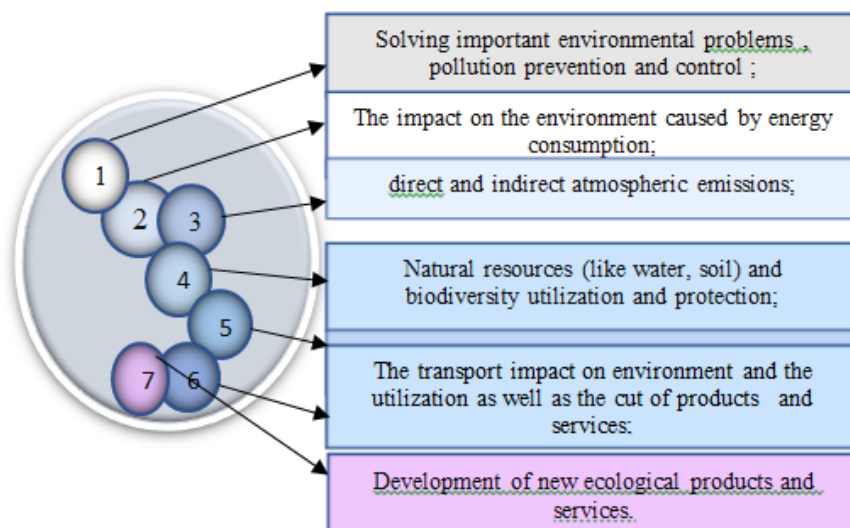


Figure 7. The Need to Use and Extend Non-Financial Indicators

Own source

Therefore, we have the methods to estimate the life span that allow entities to determine, for each product or for the entire entity: the most relevant impact; processes and emissions that produce this impact throughout the supply chain. This environmental impact may be reported differently on components or as a conglomerate.

If required, entities may refer to significant information provided in accordance with their own environmental reporting requirements, analyzing and using various strategic non-financial performance indicators, such as:

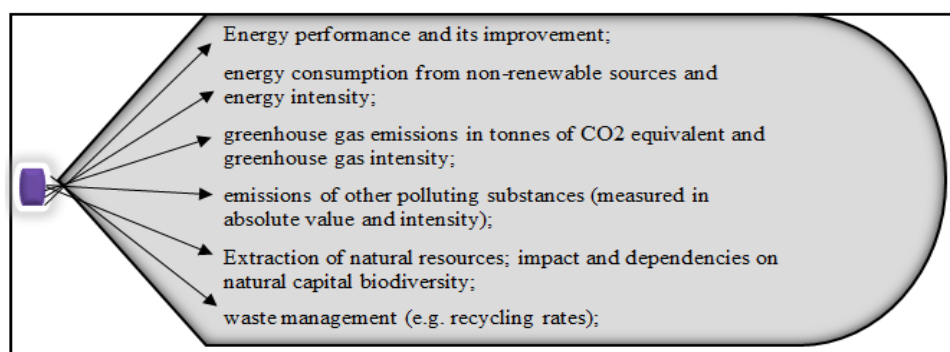


Figure 8. Key Non-Financial Environmental Performance Indicators

Source: Own Projection

The need to use social and labor issues (Ienciu, 2009). It requires entities to focus their attention on publishing relevant information on labor-related social issues, including (see on Figure 9):

- *implementation of the fundamental conventions of the International Labor Organization;
- *issues related to diversity and equal treatment in terms of employment (including those related to age, gender, sexual orientation, religion, disability, ethnicity and other relevant issues);
- *issues related to employment including consultation and/or employees' attendance as well as work conditions;
- *partnerships with trade unions including respect for trade union rights;
- *human management capital, including restructuring and career management, professional insertion, employment remuneration system, training;
- *health and work safety;
- *relationships with customers including their satisfaction, accessibility, products with possible effects on consumer health and safety;
- *effects on vulnerable consumers;
- *responsibility for marketing and research;
- *community relations including the social and economic development of local community.

Figure 9. Relevant Information on Social Issues Related to the Workforce

Own source

All the above mentioned aspects have the desired relevance only if they are analyzed and determined with the help of the following key non-financial performance indicators (Figure 10):

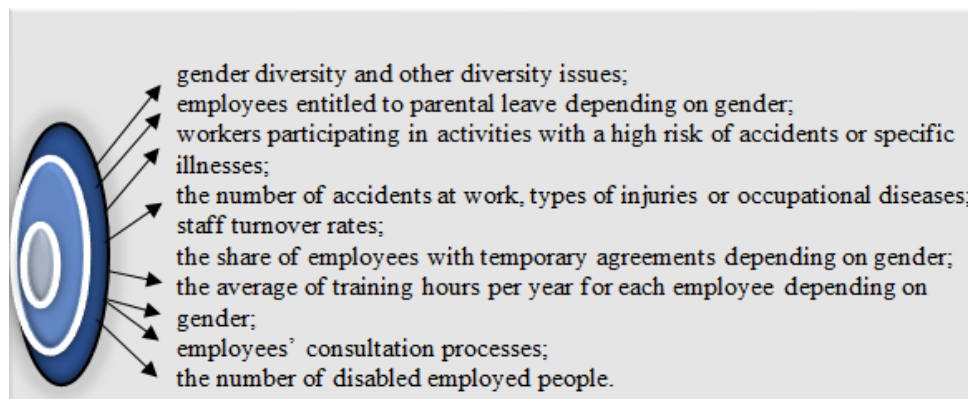


Figure 10. Key Indicators of Non-Financial Performance on Social Issues and Those Related to the Labor Force

Own Source

The need to face the corruption and bribery. Entities may publish information related to the organization, decisions, management policies, evaluation and verification of resources needed to combat corruption and bribery. At the same time, entities can justify how they analyze and prevent the fight against corruption and bribery, implement measures to prevent or minimize the opposite effects,

pursue their correct implementation and provide information on this topic at local and external level. Entities may consider it necessary to be guided by the principles of widely accepted and high quality standards of international standards, such as the OECD Guide to Corporate Bodies or the ISO 26000 standard, which makes it mandatory to publish the most relevant information, the use and extension of non-financial performance indicators (KPIs) related to the following aspects (Figure no.11):

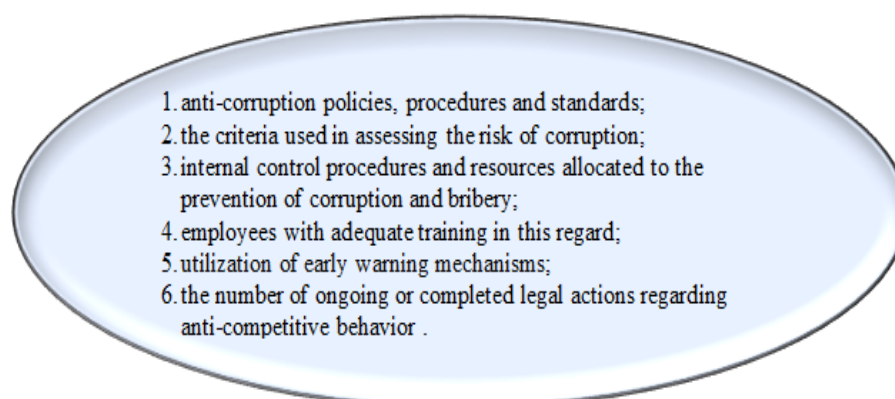


Figure 11. Key Indicators of Non-Financial Performance on Combating Corruption and of Bribery

Own Source

The need to use information on supply chain issues. Depending on the importance of the supply, due regard is paid to the principle of proportionality, with entities having to publish significant information on supply chain issues that have essential effects on their evolution, results, position or success. These include information that is important for the entities to fully understand the supply chain and how fundamental non-financial issues are given due consideration and are examined in their management. If the entities consider that the publication of detailed information regarding unavoidable developments or issues to be discussed would cause major damage, they may achieve their proposed purpose, related to transparency by publishing information set out in a summary, which does not cause major damage. Relevant information may include how entities study, among many other standards, the OECD Guide to Corporate Entities, the UN Guidelines for Business and Human Rights, and the relevant defining frameworks linked to the FAO-OECD Guide to Responsible Supply Chains. , where the use and extension of non-financial performance indicators is required, as well as the publication of relevant information, also presenting some of the useful indicators on issues, such as monitoring suppliers (see on **Figure 12**)

1. work practices including children and forced work, precarious work, wages, unsafe work conditions (including building safety, protective equipment and workers' health);
2. human beings' traffic and other human rights issues;
3. emissions of greenhouse gases and other types of water and environmental pollution;
4. deforestation and other biodiversity risks and
5. monitoring the entity's impact on suppliers, such as payment terms and averaged payment periods.

Figure 12. Key Indicators of Non-Financial Performance on Issues of Supplier Monitoring
Own Source

Other information necessary for the identification and implementation of non-financial performance indicators are: information regarding the affected ores from conflict areas, various information on management diversity, other aspects related to diversity.

Managers' perception of the importance of non-financial performance indicators is a valuable guide both on the indicators actually used and on the efforts, actions and managerial priorities at the level of economic entities. Also, the knowledge of the managers' perception regarding the importance of the performance indicators offers us fundamental indications regarding the management situation towards the various categories of stakeholders.

7. Conclusions

Both the people within the entity and those outside it will be successful if they are interested in and also have easy access to information on all aspects of the environment, employees, human rights or measures to combat corruption. Adding non-financial information to the annual financial statements facilitates a better understanding of the entity's philosophy, provides transparency and creates a unified internal and external image. These are the reasons for highlighting the need to expand and use non-financial performance indicators, which allow an overview of the entity, analyzing and detecting deviations and making decisions in order to implement the entity's strategies.

References

- *** (1999). *Modelo EFQM de Excelencia*. Arco Iris, Caso Practico y Respuesta Modelo, European Foundation for Quality Management.
- Ienciu A. (2009). *Implicațiile problemelor de mediu în contabilitatea și auditul situațiilor financiare*. Cluj-Napoca: Editura Risoprint.
- Kaplan, R. S. & Norton, D. P. (1992). *Le tableau de bord prospectif, pilotage strategique: les 4 axes du succes*. Les Editions d'Organisation.
- Kaplan, Robert, S. & Anderson, Steven, R. (2003). *Time-Driven Activity-Based Costing*. Harvard Business School. www.andredewaal.eu/docs4/webarticle-kaplanenglish.doc.
- Lebas, M. (1995). Oui, il faut définir la performance. *Revue Française de Comptabilité*, nr. 226.
- Lohman, C. et al, (2004). Designing a performance measurement system: A case study. *European Journal of Operational Research*, Vol. 156, pp. 267-286.
- Ogunsiji, A. & Ladanu, W. (2017). A theoretical study of performance measures in the strategic and corporate entrepreneurship of firms - A Guide to Performance Measurement and Non-Financial Indicators. *International Journal of Physical Sciences and Engineering*, p. 356.
- Popa, F. (2009). *Ghid pentru îmbunătățirea performanței*. Bucharest: Editura Mediarex 21, p. 13.
- Popa, Virgil (2005) *Managementul și măsurarea performanței organizației*. Editura University Press, p. 5.