

Market-Driven Management, Competitive Markets and Performance Metrics

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Abstract

Metrics are performance indicators used to indicate, measure or record values of a particular magnitude.

Metrics, seen as overall indicators of corporate performance, are one of the fundamental tools used to monitor and orient corporate management. They can be classified by: financial–non-financial; quantitative–qualitative; accounting–non-accounting; internal and external; process and end result.

Metrics can serve a dual purpose: to provide elements for assessment, inside the company environment; to provide evaluation parameters outside the company.

Keywords: Market-Driven Management; Competition; Performance; Performance Metrics; Global Markets

1. Performance Metrics in Managerial Economics

The concept of performance – and consequently its measurement – becomes extremely important for businesses¹, in relation to their capacity to express their vitality in time². Management aims to measure the results reached by assessing performance:

- in time, focusing on a single business, in different periods of reference;
- in space, assessing and comparing different situations at a given moment (one business compared to one or more competitors).

Limiting performance analysis to the measurement of corporate results, does not give a comprehensive, correct view of the question, and may in fact appear reductive and very often misleading. The concept of corporate performance may be approached in different ways, in relation to the specific need for knowledge of the interested universe, and in consideration of the different dimensions that it can express³. Very briefly, we can highlight the concepts of:

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- economic-manufacturing, financial and socio-environmental performance;
- absolute performance and relative performance (at the time of the analysis and related to other companies);
- network performance, company performance, branch performance, product line performance, process performance (related to the subject of the analysis);
- performance from a shareholder's viewpoint and performance from a stakeholder's viewpoint.

If measured precisely, performance enables management to assess corporate operations, to take corrective measures and to plan future choices: this acquires growing importance the more complex the competitive context in which the company operates.

The significance of the concept of performance and its assessment is also confirmed by the attention that management pays to the selection and management of:

- *critical variables* of performance;
- *indicators (metrics)* of performance.

Critical variables of performance are factors (corporate or contextual) on whose implementation the possibility of achieving the best corporate performance depends⁴.

Metrics are the system of indicators⁵, of various types, by which stakeholders assess a company's performance.

The basic criteria by which performance metrics are assessed may be:

- objectivity: different individuals must be able to check the validity independently, and to agree on the interpretation of the metrics used;
- comprehensiveness: the capacity to capture all the significant aspects of a given action or event;
- sensitivity to the actions and efforts made by individuals whose activities are being monitored;
- clear connection with the creation of economic value.

The concept of performance metrics goes beyond a mere reference to the index as a tool of measurement. In fact, by the approach adopted here, the metric is a *performance indicator*, used to indicate, measure or record values of a particular magnitude; metrics are therefore not limited to a consideration of the performance *indices*, informed values (based on the relationship between the two elements investigated), but they are also represented by measurements – monetary and non-monetary – that derive from observation of specific phenomena and are not necessarily expressed as an index.

In this sense, metrics, seen as overall indicators of corporate performance, are one of the fundamental tools used to monitor and orient corporate management. They can be classified by the following criteria:

- financial⁶ – non-financial⁷;
- quantitative – qualitative;
- accounting⁸ – non-accounting;
- internal and external;
- process and end result⁹.

Metrics can serve a dual purpose:

- to provide elements for assessment, inside the company environment¹⁰, structured in various ways to guarantee:
 - for management, the tools to assess corporate activities;
 - for employees, the information necessary to understand ongoing company dynamics (goals related to the assumption of a precise corporate responsibility, which are the fruit of a corporate culture oriented to cooperation rather than conflict);
- to provide evaluation parameters outside the company, which express very different goals. Very roughly:
 - in relation to suppliers and distributors, they tend to express the company's soundness and solvency;
 - in relation to the financial community, they express the capacity to generate a return on invested capital;
 - in relation to final demand, they tend to orient purchasing decisions, highlighting the convenience of the choice of the company's product over other products;
 - in relation to any partner companies with whom to develop cooperation or acquisitions and mergers, they express the company's competitive position on the market, the financial capability at its disposal, and degree of exposure to corporate risk, etc.;
 - in relation to the local community, they assert the capacity to accept a precise responsibility towards society and the environment that is demanded of corporate activities.

The variety of the indicators, as they are presented here, seems to suggest the advisability of projecting company results in a *single* indicator, which is all-embracing and therefore synthetic. However, the complexity of the need for information that permeates companies (particularly in the global context), limits the importance in terms of information, and therefore the significance, of a 'single indicator', which may usefully be replaced by the correct and targeted development of a *system of indicators*¹¹, that are significant and comprehend the corporate dynamics being analysed, created to satisfy the specific need for information of the main stakeholders.

In global markets, competition apparently develops without patterns or set rules, flexibly identify the competition drivers that are most suitable for a company's success. In these markets, the product is generally extremely complex and its value is closely linked to the sum of intangible values that make it distinct, recognisable and preferable over competitive products, while the company develops a system of intangible resources. The information system – in other words the complex system designed to provide the company with an information base on which to structure the management decisions to implement, providing the elements to assess performance – and the dimensions of corporate responsibility and socio-environmental responsibility¹² acquire particular significance, and it becomes possible to identify complex and varying indicators (mainly qualitative) to measure performance.

The concept of performance and in particular the indices used to assess it therefore take on a different value for the company in relation to the specific competitive conditions.

The company only 'lives' to the extent that it maintains relations (inside and outside the company) with the relevant environmental supra-system¹³. Analysis of the company and of its performance is therefore closely linked to the relevant environment and acquires greater significance the higher the competitive intensity¹⁴ of the market in which the company operates.

In this sense, in scarcity economies, with limited competitive intensity, we can refer to a 'single' concept of corporate performance – linked to a particularly analytical perspective (which emerges from primarily internal considerations), while in complex economies, which are increasingly characterised by widespread instability and intense competition, performance is created as an *assessment system* linked to different investigation perspectives that express the way the company or relevant corporate network operates as a whole.

We can therefore state that the concept of performance and identification of the most suitable metrics for its assessment, are closely related:

- to the characteristics of the context in which the analysis is performed and
- to the characteristics qualifying the business under examination (albeit generally conditioned by the characteristics of the relevant market and environment).

2. Scarcity Economies and Corporate Performance Metrics

Markets where competitive intensity is limited and supply is scarce are generally stable, and for the company, this reduces the need for a complex system of performance measurement. In fact, it is important to measure and analyse the phenomena *inside* the company, first and foremost the core activities that generate value. The external environment, and particularly the competitive forces present, is monitored and constantly measured, but remains subordinate to the priority performance results of the so-called internal phenomena.

Demand is clearly superior to supply; numerous purchasers cannot meet their purchasing and consumption needs, and are unable to find alternative goods or services able to satisfy them suitably. It therefore seems unjustified to study demand that does not link satisfaction of one's needs to gratification of the company product. Generally speaking, businesses operating in economies where supply is scarce, limit their spending to communications and marketing activities¹⁵. On the other hand, *competition* tends to develop primarily in different product classes, to meet a single need, and competitive intensity within the product class is limited. This condition is found on the market naturally (competitors behave like small monopolies in the territory that they control with their products), or induced by the existence of agreements between direct competitors that dominate the sources (raw materials, etc.) and control or limit their delivery.

This is the case in the fuel sector: demand is generally subject to little change, and controlled by the large players, who keep competition and market conditions stable by developing agreements and cartels to establish mutual control of supply quantities and conditions. This control is expressed primarily in the capacity of

competitive companies to manoeuvre the selling price of products, by controlling the quantities to put on the market (in scarcity economies the price depends on the quantity offered).

On the other hand, supply is also scarce as a result of the capacity of the businesses present to intervene as a predominant force on the market, to hold off possible threats (and sources of instability) determined by the entry of competitors or replacement products.

The conditions that define this type of market can be summed up briefly as follows:

- known demand that exceeds supply;
- distribution controlled by manufacturing companies;
- stability-control of supply on the basis of:
 - o competitive system designed to control and therefore *maintain* competitive conditions stable;
 - o supply quantities controlled by the company¹⁶;
 - o market price dependant on quantities offered.

However, the control of market conditions is sometimes determined by State intervention¹⁷.

The company identifies its critical performance variables and develops systems to analyse and assess the various monetary and non-monetary factors and phenomena that could improve the internal results of the organisation (for example, the choice of suppliers who are highly responsible where times and delivery are concerned).

Assessment of the corporate performance takes two main types of analysis into consideration:

- economic;
- financial.

Only in today's scarcity markets, these are combined, but to a lesser extent, with the concepts of social and environmental performance, measured by qualitative indicators¹⁸ that are considered functional to the acceptance (but not the success) of corporate operations on the part of purchasers and the market as a whole. As a result, in global markets, quantitative indicators are necessarily supplemented by qualitative metrics, which are present and considered strictly functional to the achievement of short, medium and long-term performance goals, and by an intelligence system that is essential for the competitive and colluding action of competitors.

In scarcity markets in the early 1900s (in particular the automotive sector), qualitative indicators (such as employee satisfaction, workplace safety, etc.) were not priorities for performance assessment. It is no coincidence that the introduction of the DuPont indicator system dates to the turn of the last century, focusing purely on accounting measures of economic assessment: performance was determined by the creation of a multiplying ROE, based on a pyramid structure¹⁹. This meant accepting a basically historical analytical vision, which was not very indicative of a medium to long-term perspective (and therefore focused on forecasting future performance). In spite of this obvious limit, similar analysis is still fundamental today to assess corporate economic performance, and is applied successfully in stable markets.

In economies where competition is not intense, output is placed completely and immediately with demand. This obviously enables a company to develop analyses

that do *not* consider the possibility of the market refusing the company's products, nor the opportunity for the company to support sales – thus modifying short-term assessments of the company's selling possibility-capacity.

In the case of oil products and fuel, for example, the very nature of the product and of demand (of the derivative type, being linked to that for automotive products, etc.), makes the latter very inelastic with respect to income, price and the promotion (both advertising and otherwise) of the product²⁰. What is more, 'both the global supply of oil, and that of refining processes are controlled throughout the world by a small number of organisations that can determine the quantities produced and delivery times. (...) Demand reveals a price rigidity that makes it possible to keep consumption stable even when prices grow rapidly'²¹. On the other hand, the rigidity of demand is also an effect of the latter's inability to acquire large quantities of fuel (creating stocks) or to access truly alternative sources of energy, elements that certainly strengthen the position of supply (as a whole) over demand.

In view of the efforts by the competition to control the competitive context, the company's short, medium and long-term capacity for survival and success is determined by the trend of core operations – first and foremost manufacturing. Analysis by management focuses primarily on internal events, with production as a priority: quantities, costs, times, development and market placement conditions, etc. The company is able to place its entire output on the market without difficulty and there is therefore no need to carry out detailed analysis of environmental dynamics (competition, market, etc.). Production is the heart of the company and, as a consequence, the primary object of analysis for the purposes of assessing the organisation's profitability and vitality. In this sense, 'if performance related to purchasing raw materials, producing and selling products and guiding the workforce is planned, measured and controlled so as to highlight both the conflicting factors and the easily influenced factors, net profit is generated as an automatic consequence'²².

By simplifying negotiations, the concept of profitability at product level emerges from the comparison between market position (which derives from market share) and unit margin, i.e. the difference between revenue per unit and variable cost per unit²³. To obtain corporate profitability, overheads and tax must be subtracted from the contribution margin calculated in this way. To improve corporate profitability, it may be advisable to adjust the volume of purchasers, margin per customer or overheads.

We can however assume that:

- the general stability of the context and the market continues;
- there is equality between output and sales (i.e. the presence of unsold products is not contemplated);
- the hypothesis of a scarcity market remains.

From the above, we can conclude that the company can influence profitability:

- by strengthening its market position, increasing its absolute market share, the margin of contribution per unit being equal. This is possible by increasing the manufacturing capacity of company facilities;
- by modifying the contribution margin per unit (adjusting the unit selling price and/or compressing the variable costs per unit).

In the cases mentioned, the importance of the internal analysis of production emerges, focused primarily on accounting and financial metrics, which use and process data from management and above all cost accounting.

The assessment of corporate performance from an economic viewpoint is supported by analysis of the financial dimension, which focuses on cash trends and financial results. Reporting is a useful and versatile tool to identify financial performance, as it allows the values of the main financial movements performed by the company during the period under examination to be calculated.

In a study of 1996²⁴, designed to sum up the different concepts of corporate performance in literature, eight strictly internal dimensions are defined²⁵, related to precise indicators (Table 1).

Table 1: *Performance Dimensions and Related Indices*

Dimension	Measure
Efficiency	ROI, ROE, ROA, Return on net worth, Gross revenues per employee, Net sales to total capital, Return on average equity
Profit	Net profit margin, Net profit Level, Net profit from operations, Pretax profit, Stock price appreciation, Earnings per share
Size and liquidity	Cash flow level, Current ratio, Quick ratio, Cash flow to total debit
Success/ Failure	Discontinued business, Return on net worth, Salary of owner, Change in gross earnings
Market Share	Respondent assessment, Firm product sales to industrial product sales, PIMS value
Leverage	Debt to equity, Times interest earned, Long-term debt to equity, Stockholders capital to total capital

Source: Adapted from G.B. Murphy, J.W. Trailer, R.C. Hill, *Measuring Performance in Entrepreneurship Research*, op. cit., p.16.

However, this analysis has significant limitations, which limit its validity for scarcity economies. The following are among the most important:

- first of all, the economic-financial metrics are indicators that emerge from the past; so they tend to have a limited ability to 'predict' the future performance of the organisation;
- moreover, they do not consider the sum of non-monetary quantitative indicators (or qualitative metrics such as customer satisfaction).

However, these considerations are of little significance in scarcity economies: the characteristic elements of these latter – in particular, relative stability and limited competitive intensity (induced by the common action of competitors) – allows mainly internal economic-financial metrics to be used to explain corporate performance.

3. Controlled Competition Economies and Corporate Performance Metrics

Controlled competition economies, with controlled competition, reveal fairly high competitive intensity, which is expressed within the same product class, and the decisive presence of agreements between direct competitors (which often degenerate into cartels that harm competition and the market), designed to control and maintain existing conditions²⁶ on markets that are relatively stable.

The company becomes strongly demand oriented²⁷, first and foremost by setting up a corporate information system to collect information inside the company, and outside – regarding the market and demand²⁸, and by developing suitable promotional activities, designed to solicit demand for company products.

On the other hand, distribution also modifies its attitude to manufacturing companies, adopting an active, independent position, recognising the importance of:

- its essential role, halfway between industrial supply and final demand (to make products available to purchasers placing several alternatives in a single independent physical space – the shelf²⁹) and, as a consequence;
- its own bargaining power, reserving a growing portion of the income from this channel.

Companies operating in economies where competition is controlled, develop complex supply (classified as tangible and intangible), to achieve demand that has refined its tastes, and therefore its requests³⁰ in a more suitable manner. The company cannot avoid considering manufacturing and internal management requirements, and develops a market approach based on the *differentiation* of the range by *segments* of demand and, through a modular manufacturing approach³¹, it blends standardisation and customisation. Competition develops primarily on the basis of the selling price (price competition) or better, on the basis of multiple prices elaborated by the company, to which different quantitative levels of product correspond. We can therefore see that the link between price and quantity is inverted in these markets compared to scarcity markets. Faced with high competitive intensity within a single product class and relative freedom in manufacturing terms (there is no constraint in terms of capacity or market that limit companies in production), the quantities offered (and therefore produced) depend on the price level at which they are presented to the market. The typical conditions on the markets considered are in sectors where the product has no valid replacements: for example, smoke products, and cigarettes in particular³².

Companies that operate in economies where competition is controlled generally have a complex ownership set-up, to maintain the so-called ‘controlling interest’ in the hands of a few, large stockholders, while the remaining shares are fragmented (widespread stockholding). Minority stockholders are unable to influence the decisions taken by management; companies look for external financing, even through Stock Exchange listing. The importance of the financial dimension thus emerges to support corporate management.

Particularly if it is listed, a company must consider the demands – and thus the need for information – of different categories of stakeholders³³:

- stockholders and the financial community generally: in this way, we aim, if possible, to maintain and increase the company’s capacity to attract capital by generating (or promising to generate) financial income;

- intermediate and end customers; the growing importance of distribution is expressed in their influence on management of the industrial company.

The stakeholder system expresses complex demands for knowledge, which are not limited to the economic-financial aspects of corporate performance.

The typical environmental conditions – in which the importance of the figure of the customer emerges and the search for differentiation to qualify the products offered as reflecting the needs of demand – make the corporate performance variables more complex. Because it is multidimensional, the concept of corporate performance obliges the company to refine and distinguish its indicator system.

In these economies there is a tendency to attribute almost exclusively economic-financial significance to corporate performance, and to perform subsequent assessment (i.e. oriented to the past). On the other hand, in economies with controlled competition, where the balance is not stable, limiting the concept of performance merely to an economic-financial dimension is reductive, because it could lead to a forcedly partial analysis, which is purely internal, in which the complexity of the context is underestimated, and attention focused:

- inside the company, to *non-financial* (quantitative and qualitative) management measures;
- outside, to final and intermediate *demand*. In this context, assessments are extended to the concepts of customer satisfaction, brand and store loyalty, repeated purchasing.

In this sense, context analysis seems to suggest to companies to enlarge the scope of their analysis: ‘excellent companies turn their attention to *performance indicators*, rather than on detailed information about costs, variations, net profits, cash flows or efficiency of the action³⁴. Economies where competition is controlled reveal a very dynamic link between company and final demand, which refines its needs and therefore the purchasing process, and between company and distribution, which becomes an active player, as well as the emerging importance of finance in terms of the acquisition of the huge resources necessary to sustain corporate development.

Companies cannot limit themselves to exploring issues that fall exclusively within the company boundaries, but need a system of indicators that is able to describe a complex reality within the company and in relations between the latter and demand.

The link between the different performance levels is deep and two-pronged:

- on one hand, *subordination* of the internal dimension to the external: in fact, the overall assessment of company performance, considers as positive not only economic-technical superiority, but also the perception – and acceptance – of this superiority by final demand;
- on the other, the *integration* of the internal dimension and analysis of demand, in relation to the use of different performance indicators, regarding :
 - o internal indicators: primarily administrative (management and cost analysis), supplemented by non-financial measures (stock trends, turnaround times, assessment of human resources, etc.);
 - o external indicators (of demand and market): of a quantitative (primarily absolute and relative market share) and qualitative type (customer satisfaction, customer retention, quality, etc.), linked to the development, marketing and promotion of the product (from which

the importance of intangible supply resources and of their assessment emerges).

Demand represents the company's competitive focus; as a result, performance assessment draws on a system of various types of indicator, which are born from complex analysis within the corporation, but gradually interacting with indicators that address the outside world, and particularly demand, both final and intermediate. We underline that 'the external performance indicators are used to examine the conditions for the effectiveness of the firm's performance in order to show how internal economic efficiency is linked to an efficient relationship between the quality and price of the products sold or distributed; that is, to the production of value for the user and the client, as measured by appropriate outcome performance measures'³⁵. In these economies, the degree of complexity of the corporate performance increases, measured using the following indicators:

- internal;
- external, and referred to:
 - o demand (final and intermediate);
 - o financial community.

The internal indicators express a company's capacity to monitor its internal dynamics. In this sense, the management control system constitutes a fundamental tool to supplement and incorporate into the system the data deriving from preventive analysis, from simultaneous monitoring of management and, finally, from a subsequent check on the achievement of set, detailed objectives, for example, in company budgets.

The external indicators can be elaborated differently to assess the relation with demand, or address the financial community. The former express a primarily corporate 'use'; the latter are developed by the company, but transmitted outside with clear financial goals³⁶.

The study conducted by Kaplan and Norton in 1996³⁷ outlined four performance perspectives (identifying objectives, measurements, targets and initiatives for each of them):

- financial perspective;
- customer perspective;
- internal processes perspective;
- learning perspective.

The first two involve the external dimension; the latter, on the other hand, emerge from an internal vision.

In the set-up adopted here, the client perspective is made up of five primary quantitative and qualitative measurements, which are related: satisfaction, acquisition, loyalty, profitability, market share.

The metrics used in the customer perspective also include: the number of customers; lost customers; the number of complaints; marketing expenses; the number of visits per customer, etc..

The customer perspective is therefore the foundation on which the other perspectives are based:

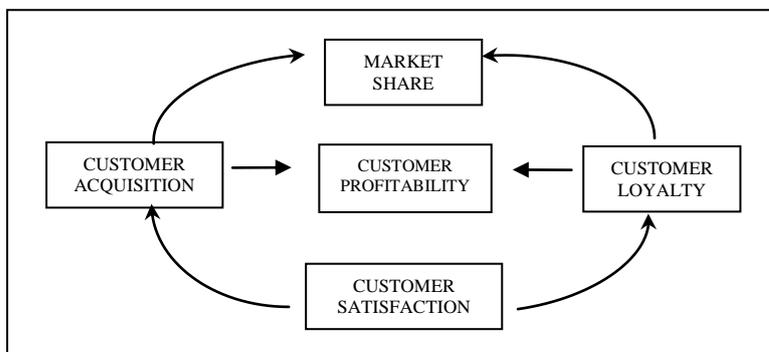
- the internal process perspective identifies the key processes in which the organisation must excel to support the decisions and goals identified in the customer perspective and therefore create 'value';

- the learning and growth perspective identifies personal behaviour, capabilities and skills in the organisation's employees; technologies designed to support corporate development, designed to create value by achieving the set goals;
- the financial perspective (synthetically, the achievement of the set economic-financial results) focuses on satisfying the customer (and therefore, on sales, satisfaction and loyalty) by exploiting the internal perspectives.

The Balanced Scorecard, originally used only as a tool to assess corporate management, has gradually been interpreted as a *strategic* tool of management (with the goal of action and not simply of analysis). However, the perspectives identified by the two Authors are a suitable managerial tool for companies operating in economies with an unstable balance, for which a customer focus is expressed by a marked orientation to marketing (the prevailing orientation in the contexts analysed above), although there are clear gaps for companies incorporated in a network and faced with competitive contexts that are intensely competitive and over-supplied.

To conclude, contexts where competitive intensity is limited, are usually stable, with ample potential demand: this justifies the importance acquired by a primarily internal analysis perspective and therefore by a concept of performance based on primarily economic-financial metrics. On the other hand, in economies where competition is controlled, where there is a dynamic balance between demand and supply, a competitive market orientation prevails, based on complex market conditions; the definition of performance therefore takes internal and external inquiry perspectives into consideration, with reference to the customer.

Figure 1: *The Customer Perspective According to Kaplan And Norton*³⁸



Source: Adapted from R. Kaplan, D. Norton, *The Balanced Scorecard*, 1996, *Harvard Business Review*.

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Notes

¹ 'Accurate and appropriate measurement of performance is critical in entrepreneurship research. Without adequate means of measuring performance, theory development is impeded, and it becomes difficult to develop prescriptions for entrepreneurs.' G.B. Murphy, J.W. Trailer, R.C. Hill, *Measuring Performance in Entrepreneurship Research*, in *Journal of Business Research*, n. 36, 1996, p. 15.

² On the concept of the vital entrepreneurship system we refer you to G.M. Golinelli, *L'approccio sistemico al governo dell'impresa*, Tomo I, *L'impresa sistema vitale*, CEDAM, Padova, 2000.

³ For example, taking as a reference a merely 'internal' dimension, performance may be divided into three levels: organisation, process and work/worker (G.A. Rummler, A.P. Brache, *Migliorare la performance aziendale*, Franco Angeli, 1996). On the other hand, many companies have already adopted a different approach, in which the concept of performance breaks down into economic, social and environmental (this type of classification is adopted by several companies: for example, by SABAF – www.sabaf.it). However, particularly in analysis conducted into market trends, analysis is significantly limited: for example, the comparison between the performance of companies under foreign control and those under Italian control adopts a 'common combination of indicators: productivity and labour costs, profitability and intensity of investments and of spending on research and development'. See FITA (Federazione Italiana del Terziario Avanzato per i Servizi Innovativi e Professionali), *Struttura e attività delle imprese a controllo estero*, 2001.

⁴ Cf. R. Simons, *Levers of Control: How Managers Use Innovative Control System to Drive Strategic Renewal*, Boston, Harvard Business School Press, 1995. Critical variables are not defined unambiguously, but depend on the characteristics of the company and the context in which it operates.

⁵ 'A performance measurement system may be defined as a set of measurements used to quantify both the efficiency and the effectiveness of company activities, see L. Lucianetti, *Balanced Scorecard e controllo aziendale*, Aracne Ed. Rome, 2004, p.157.

⁶ In particular, financial measures 'communicate financial objectives and make unitary and general representation of corporate performance possible, represented on the basis of a number of rules and conventions structured so as to unequivocally compose the expectations and requests of various classes of stakeholder', Cf. M. Agliati, *Condizioni di efficacia delle misure non finanziarie nella valutazione delle prestazioni aziendali*, cit.

⁷ 'For the former, the unit of measurement is monetary: revenues, expense, profits. Non-financial measurements, on the other hand, are expressed in non-currency units: quantity, reject rates or market share, see R. Simons, *La gestione delle performance aziendali. Ruoli, responsabilità e meccanismi di controllo*, EGEA, Milan, 2005 p.74. According to the author, 'two reasons may be suggested to explain the limited role of financial indicators:

not all corporate activities may be expressed in monetary terms (...);

the translation of corporate activities in monetary terms is performed to simplify reporting activities in a commonly expressed language. However, innumerable non-financial events precede this stage of the final translation, each of which demands managerial control.' See R. Simons, *Misurare la performance aziendale*, EGEA, Milan, 1987, p. 3.

⁸ In this regard, we underline that 'most methodologies for corporate strategy assessment and planning and operating control are of accounting origin; on the basis of analytical schemes developed throughout the 20th century, a company's economic balance, both past and future, could be examined by analysing the profiles of operating profitability, growth and stability, solvency and equity soundness', see M. Agliati, *Condizioni di efficacia delle misure non finanziarie nella*

valutazione delle prestazioni aziendali, in F. Amigoni, P. Miolo Vitali. (edited by), *Misure multiple di performance*, EGEA

⁹ Cf. R.J. Best, *Market-Based Management*, Prentice-Hall, 2005.

¹⁰ According to Comuzzi, for example, corporate performance indicators could be divided into:

- measurements to express performance in the operating area;
- measurement founded on cash flows (with the respective links and determinants);
- measurements of profitability (with the respective links and determinants);
- measurements to express performance in the financing area (expressing the cost of capital).

¹¹ Cf. F. Amigoni, P.M. Vitali (ed.), *Misure multiple di performance*, EGEA, Milan, 2003.

¹² Cf. E. Arrigo, *Responsabilità aziendale e performance economico-sociale*, Giappichelli, 2008, M. Molteni, *Responsabilità sociale e performance d'impresa. Per una sintesi socio-competitiva*, Vita e pensiero, Milan 2004.

¹³ 'It is not relevant to study the systematic characteristics of a certain organisation, X, in isolation, without also observing the supra-system in which X is included and the sub-system it includes', see G.M. Golinelli, *L'approccio sistemico al governo dell'impresa. L'impresa sistema vitale*, vol. I, cit., p. 114.

¹⁴ 'Competitive intensity is the degree of interdependence between competitors and regards the significance of the operations of one competitor for other competitors. The greater the importance for a company of information about its competitors' activities, the greater the competitive intensity of that market', see M. Corniani, *Sistema informativo aziendale e dinamiche competitive*, Giappichelli, Turin, 2000, p.13.

¹⁵ Cf. J.J. Lambin, Is Gasoline Advertising Justified?, *The Journal of Business*, vol. 45, n. 4, The University of Chicago Press, 1972.

¹⁶ In this regard and in the context of the system of motor vehicle fuel supply, Corniani observes that the 'installed capacity to extract and refine oil does not depend on the level of demand, which is far superior to the supply delivered, but on dimensions linked exclusively to supply', see M. Corniani, Push and Pull Policy and Market-Driven Management, *Symphonya. Emerging Issues in Management* (symphonya.unimib.it), n. 1, 2008.

¹⁷ The Government's intervention is designed to keep competitive intensity as low as possible, by adopting some of the costs of non-competition; state intervention enforces a stable and essentially closed context for the companies present, which are defended above all by foreign competition. This type of policy falsifies the natural market balance, which is determined by pure confrontation between demand and supply, determining the achievement of an 'unnatural' balance on the market; this type of balance is in many ways similar to the situation determined in the case of cooperating competitive companies. As we will show in the following paragraph, on one hand cooperation is designed to reduce competition costs; on the other, however, it imposes sustaining costs that can be defined as the cost of non-competition. There are monetary and non-monetary costs. In economies where competition is controlled, the total cost to domestic companies of non-competition with foreign companies is often met by the State. In these economies it is therefore possible to state that competition costs are paid by the Government and in favour of domestic economies – and therefore companies, among which various solutions develop, designed to compress the competition costs that weigh on corporate structures. For the concept of the costs of non-competition, we refer you to M.E. Garbelli, *Localizzazione produttiva e dinamiche competitive*, G. Giappichelli, Turin 2004.

¹⁸ Indicators of this type are easily identified in the code of conduct and code of ethics (Cf. E. Arrigo, Code of Conduct and Corporate Governance, *Symphonya. Emerging Issues in Management* (symphonya.unimib.it) n. 1, 2006). Both can be considered instruments of governance as well as indicators of corporate performance. Very often they represent a basic requirement when selecting a supplier or distributor, and for the purchasing decisions of the end customer.

¹⁹ In about 1915, DuPont adopted a system of financial indices (DuPont Chart), elaborated by the financial analyst Donaldson Brown; the metrics identified acquired a pyramid form, linking a wide range of indicators to the return on the investment, with a clear hierarchical structure, which is able to reveal a link between the measurements and the corresponding organisational levels. To start with, the ROE itself was the sum of three indicators (net profit margin, asset turnover and equity multiplier). Cf. A. Cariola, *La misurazione sistemica delle performance d'impresa*, Cedam, Padova,

2006; W.J. Bruns Jr, *Performance Measurement, Evaluation and Incentives*, Harvard Business School, Harvard, 1992; Johnson H.T, Kaplan R.S., *Relevance Lost. The Rise and Fall of Management Accounting*, Harvard Business School, Boston, 1987; Eugenio Pavarani (ed.), *Analisi finanziaria*, Mc Graw Hill, Milan, 2001.

²⁰ On this regard, Lambin points out that: ‘the main product characteristics strongly suggest that overall primary demand is inelastic with respect to income, price and advertising (...). While primary demand is inelastic, the demand for an individual brand may be very elastic with respect to the price of other competing brands’, see J.J. Lambin, *Is Gasoline Advertising Justified?*, cit., p. 586 and following.

²¹ See M. Corniani, *Push and Pull Policy and Market-Driven Management*, cit.

²² See R. Simons, *Misurare la performance aziendale*, cit., p.4.

²³ As Simons underlines, ‘...the managers of the profit centres are responsible for both the revenues and the costs. One expects these managers not only to achieve their revenue and cost objectives, but also to look for trade-off opportunities between costs and revenues to reach or surpass profit objectives, see R. Simons, *La gestione delle performance aziendali. Ruoli, responsabilità e meccanismi di controllo*, EGEA, Milan, 2005, p.77.

²⁴ Cf. G.B. Murphy, J.W. Trailer, R.C. Hill, *Measuring Performance in Entrepreneurship Research*, in *Journal of Business Research* n. 36, 1996.

²⁵ The Market Share is not an internal performance measurement, because it derives from a comparison between the sales achieved by the company in the relevant market and total sales. However, in scarcity economies, calculating market share presupposes numerous simplifications, determined by the main characteristics of the markets (stable or with limited competitive intensity).

²⁶ Similar forms of cooperation express the efforts by companies to govern external conditions and to shift competition from the price (price competition) to the characteristics that qualify supply (non-price competition).

²⁷ On these markets, sales promotion acquires unquestionable significance for the company, based in particular on promotional activities performed in store and in communications.

²⁸ Regarding the information system and the role of information in the various competitive conditions, we refer you to M. Corniani, *Sistema informativo aziendale e dinamiche competitive*, Giappichelli, Turin, 2000.

²⁹ Distribution contracts the selling conditions with production right through the shelf: what does not reach the shelf cannot be chosen by the purchaser or, therefore, sold. This simple consideration reveals the power of distribution in economies where competitive intensity is not limited. On the other hand, distribution acquires power even in consideration:

- of the great availability of information which it can easily manage and which is useful to the manufacturer;
- of the concentration of several products competing in the same place (a fact that allows the customer to perfect its purchasing in a single shopping expedition);
- of the power to negotiate the positioning of the products proposed in the point of sale with manufacturers.

³⁰ It is in these markets that the concept of market research is developed. Corniani underlines that ‘market research increases and focuses on the causal research of the market’s reaction to measures taken by businesses regarding products, prices, communications and distribution’, see M. Corniani, *Push and Pull Policy and Market-Driven Management*, cit.

³¹ Regarding modular production and flexible manufacturing system, we refer you to the ample national and international bibliography provided. By way of example we mention: S. Gallinaro, *Imprese e competizione nell’era della modularità*, CEDAM, Padova, 2001; B.J. Pine II, *Mass Customization. The New Frontier in Business Competition*, Harvard Business Review, July-August 1993; M. Mariotti, *Verso una nuova organizzazione della produzione*, ETAS, 1994.

³² ‘On the basis of the inherent features of the product, the need expressed by the purchaser (to take a dose of nicotine, enjoying the pleasure this brings) can only be satisfied by a product that belongs to the same product class. Replacement products, belonging to different product classes, are not able to satisfy the needs of demand in full and they address customers who actually have different needs: not ‘to smoke’, but ‘to stop smoking’, thanks to alternative products such as patches,

inhaled nicotine, chewing-gum, sweets, anti-stress balls and other products which, together with the will-power of someone who wants to stop being a smoker, manage to stem this desire.' See M. Garbelli, Product Differentiation Costs and Global Competition, *Symphonya. Emerging Issues in Management* (symphonya.unimib.it), n. 1, 2005.

³³ 'A stakeholder is any group or individual who can affect, or is affected by, the achievement of a corporation's purpose. Stakeholder include employees, customers, suppliers, stockholders, banks, environmentalist, government and other groups who can help or hurt the corporation', see R.E. Friedman, *Strategic Management. A Stakeholder Approach*, Pitman, 1984, p. 28. We must also remember that 'the stakeholder theory is born out of an awareness of the growing importance of the environment and the subjects/systems that make it up, in relation to pursuing the corporate purpose. The evolutionary logical of the company is therefore decided by governance decisions which must constantly reflect the expectations of the various categories of social interlocutors. (...) However, we must underline that the company's various interlocutors do not have the same influence on the governance decisions', see G.M. Golinelli, *L'approccio sistemico al governo dell'impresa*, Tomo I, cit, p. 65 and following.

³⁴ See R. Simons, *Misurare la performance aziendale*, cit. p. 4. We must also consider Peters-Waterman, *In Search of Excellence: Lessons from American's Best Run Companies*, Harper&Row, 1982. The authors highlight that, in the context of analysis of examples of excellence in the U.S.A. in the 1980s, 'financial and strategic goals are never defined in isolation. They are always discussed in the context of other decisions that the company expects to implement with positive results. The idea that profit is a natural consequence of doing something with a positive result, and not an end in itself, is also generally accepted', See Peters-Waterman, *In Search of Excellence: Lessons from American's Best Run Companies*, cit., p. 284.

³⁵ See P. Gazzola, P. Mella, *Corporate Performance and Corporate Social Responsibility (CSR). A Necessary Choice?*, in *Economia Aziendale 2000* web, n. 3/2006, p. 15. On this issue, we refer you to R.L. Shallock, *Outcome-Based Evaluation*, Plenum Press, New York, 1995; P.F. Druker, *Il grande cambiamento*, Sperling & Kupfer Editori, Milan 1996.

³⁶ The latter are not only applied in analysis regarding companies that operate in contexts of dynamic balance, because they are able to express the same need for information even for companies in scarcity economies.

³⁷ Cf. Robert S. Kaplan, David P. Norton, *The Balanced Scorecard: Translating Strategy into Action*, 1996, Harvard Business Review.

³⁸ Cf. R.S. Kaplan, D.P. Norton, *The Balanced Scorecard: Translating Strategy into Action*, cit.