

THE “ANIS-BE (Advanced Neural Identified Social - Business Enterprise) Model” IN THE STRATEGIC CORPORATE GOVERNANCE POLICIES

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ABSTRACT

The paper focuses on a Theoretical Business Model [“The “ANIS-BE (Advanced Neural Identified Social - Business Enterprise) Model”] a proposal from Business Economics to absorb the current crises and to restore competitiveness, profitability and durability to the American and European Business System.

The present-day no-confidence towards the Business System is the consequence of the limits offered by the corporate models. The greatest deficits offered by the Business System, concern: 1) the limits offered by the present Corporate Governance models and the several conflicts of interest (for example between corporate management and the merchant banks' actions or the relations between the activities of auditing and of consulting made by the audit companies); 2) the asset-liability management policies; 3) the globalization strategies.

“The ANIS-BE Model” links the instruments of Corporate Social Responsibility disclosure, to the marketing strategies oriented to consumer behaviors, as are defined by the neural and cognitive sciences.

The architecture of the model introduces - inside the competitive enterprise - the following requirements: a) an advanced profile; b) a neural-cognitive profile; c) an identified profile and d) a social profile.

Today it is very important to link the marketing strategies oriented to the consumer behaviors to the Corporate Social Responsibility instruments.

So, this implies an intense social action based on transparency, a dialogue with the stakeholders, a knowledge management, all of which require adequate communication instruments: in order to restore the trust relationship that links the community to the Corporate System, it is also necessary to develop the typical instruments of the Corporate Social Responsibility.

INTRODUCTION

The greatest deficits offered by the present American and European Business System, concern:

- a) The limits offered by the present Corporate Models inside the Macroeconomic System;
- b) The Corporate Policies not oriented rightly to the Consumer behavior.

The first issue - the limits offered by the present Corporate Models - regards:

- The several conflicts of interest, for example between the corporate management and the merchant banks' actions or the relations between the activities of auditing and of consulting made by the audit companies;
- The asset-liability management policies;
- The globalization strategies.

About the Macroeconomic System it is necessary to concentrate ourselves on some important signals, such as:

- a) an economic growth in the Far East Area [with the Chinese leadership that measures 9% in the Real Gross Domestic Product growth rate (GDP growth rate)];
- b) an economic recovery in the U.S Area [with different trends between the Real GDP growth rate (4,06%) and the unemployment rate (6-5%)];
- c) an economic stagnation in the European Area [Real GDP growth rate (2%) and the unemployment rate (9%)].

The picture emerging from the projections contains a number of risks. On the external side, high and volatile oil prices and persistent global imbalances pose downside risks to growth. On the domestic side, there are uncertainties surrounding the evolution of consumption, while the very favorable financing conditions and the recovery in corporate earnings could lead to higher investment growth than currently projected.

As regards structural developments, the euro area has seen relatively low trend productivity growth since the mid-1990s. An analysis of the determinants of productivity shows that lower productivity growth in the euro area has been partly related to higher

employment due to greater participation of lower-skilled labour.

Sustained wage moderation and some progress in labour market reforms aimed at increasing labour market participation appear to have partially shifted production towards a more intensive use of labour.

There are also indications that the slower pace of productivity growth observed in the euro area since the mid-1990s reflects an insufficient use of new productivity-enhancing technologies. While productivity growth has increased in sectors that produce information and communication technologies or provide related services, it has declined in many other areas of the economy. This points to structural rigidities in the euro area that prevent or hinder the fast and effective dissemination of new technologies and improved production processes across the economy.

Against this background, structural reforms that stimulate innovation, investment and productivity, and promote the use of new productivity-enhancing technologies are crucial. Stimulating product market competition, facilitating restructuring and improving human capital through adequate educational systems and “on-the-job” training are likely to speed up productivity gains from the use of new technologies¹.

The second issue - the Corporate Policies not oriented rightly to the Consumer behavior - refers to the ways to restore profitability and durability² to the American and European Business System: it's necessary to make investigations about the Corporate Policies, transferring some new innovative concepts from the Cognitive & Neural Sciences to the Business Economics and this is what we try to make in the following paragraphs.

The Architecture of the “ANIS-BE Model”

The architecture of the Model identifies the Structure of the Excellent Business Enterprises (S-EBE, as Y = dependent variable), in function of the following variables:

- a) Cognitive & Neural Knowledge oriented to capture the consumer behaviors (CNK, as X = independent variable);
- b) Glocal Strategies (GS, as J = independent variable);
- c) Instruments of Corporate Social (and/or Environmental) Responsibility (I-CSR, as K = independent variable).

So these relations may be presented, by an ideal function as [**with reference to Table n. 1**]:

$$Y = f(X, J, K),$$

where:

Y = Structure of the Excellent Business Enterprises (S-EBE); it depends on:

- X = Cognitive & Neural Knowledge (CNK);
- J = Glocal Strategies (GS);
- K = Instruments of Corporate Social (and/or Environmental) Responsibility (I-CSR).

These requirements are analyzed in the following paragraphs.

Cognitive & Neural Knowledge (X = CNK) oriented to capture the consumer behaviors: an interpretation between Theories and Dynamics

The main problem about the present American and European Business System, concerns the marketing strategies: in several cases the consumer is in trouble to identify the enterprise and their products.

This happens for several causes, for example:

- often the price/quality ratio is not competitive;
- there is no continuity between the different goods: they are too different from each other;
- wrong advertising campaigns, that don't capture the consumer sentiment;
- the multi-brand strategy has several limits;
- etc..

A right brand strategy must restore identity to the enterprises and to their products, in one direction: capturing the consumer sentiment.

To build the competitive advantage we have to invest more resources in Research & Development expenditure, modelling an elastic enterprise by a neural network.

A neural network is a complex nonlinear modelling technique based on a model of a human neuron.

Neural and cognitive applications influence:

- a) the Information System and Marketing Areas directly;
- b) all the others Corporate Areas indirectly.

This criteria regards the Business Economics, that study the Structure of the enterprises (S-EBE) in a Systemic Approach ³ [with reference to **Table n. 2**].

This approach identifies the following Corporate Functional Areas in the Structure of the enterprises:

- a) the Core Functional Areas: Research & Development Area; Marketing Area and Production & Logistic Area;
- b) the Integrative Functional Areas: Finance Area and Organization & Behavior Area;
- c) the Control Functional Areas: Strategic Planning Area and Information System Area.

Before we have explained that the Neural and cognitive applications influence:

- a) the Information System and Marketing Areas directly;
- b) all the others Corporate Areas indirectly.

In the Information System Area the neural net is used to predict outputs (dependent variables) from a set of inputs (independent variables).

In the Marketing Area, the neural and cognitive applications allow to orient the Corporate System to the consumer behaviors: so it is necessary to realize a Cognitive & Neural knowledge (CNK) oriented to capture the consumer behaviors.

We'll investigate, with your synergic contribution, to answer at the following question: what is the decision making model inside consumer's behaviors?

To answer to this question we can use some recent theories, such as:

1. The Expected Value Theory ;
2. The Adaptive Unconscious Theory;
3. The Paradox of Choice Theory;
4. The Left Brain Marketing Theory.

Although mathematical approaches to decision-making propose different formulae for identifying the response a subject should choose under a given set of conditions, nearly

all theories require the decision-maker to have some knowledge of two environmental variables ⁴:

- a) the gain expected to result from an action;
- b) and the probability that the expected gain will be realized.

The expected value theory of Arnaud and Nichole ⁵ proposes that a rational decision-maker should multiply expected gain by the probability of gain to establish an expected value for each course of action, and then should choose the option with the highest expected value.

Although subsequent theorists have proposed different mathematical combinatorial rules that provide more accurate models of the decision-making process, knowledge of the gain expected from a response and the probability of realizing that gain is still considered to be critical to the computation of rational choice.

Several marketing strategies are wrong because they don't investigate enough inside the consumer's adaptive unconscious. The adaptive unconscious that empirical psychology has revealed, and that Wilson describes, ⁶ is much more than a repository of primitive drives and conflict-ridden memories. It is a set of pervasive, sophisticated mental processes that size up our worlds, set goals, and initiate action, all while we are consciously thinking about something else.

If we don't know ourselves - our potentials, feelings, or motives - it is most often, Wilson tells us, because we have developed a plausible story about ourselves that is out of touch with our adaptive unconscious.

Citing evidence that too much introspection can actually do damage, Wilson makes the case for better ways of discovering our unconscious selves. If we want to know who we are or what we feel or what we're like, Wilson advises, pay attention to what we actually do and what other people think about us. Showing us an unconscious more powerful than Freud's, and even more pervasive in our daily life, *Strangers to Ourselves* marks a revolution in how we know ourselves.

But, can the Business Enterprises produce the goods or the services really desired by the consumers? The consumer behaviors are defined by the neural and cognitive sciences, that make new current research.

In the Paradox of Choice ⁷, Barry Schwartz explains at what point choice - the hallmark of individual freedom and self-determination that we so cherish - becomes detrimental to our psychological and emotional well-being. Schwartz shows how the dramatic explosion in choice - from the mundane to the profound challenges of balancing career, family, and individual needs - has paradoxically become a problem instead of a solution.

By synthesizing current research in the social sciences, Schwartz makes the counter intuitive case that eliminating choices can greatly reduce the stress, anxiety, and busyness of our lives. He offers eleven practical steps on how to limit choices to a manageable number, have the discipline to focus on those that are important and ignore the rest, and ultimately derive greater satisfaction from the choices you have to make.

A correct framework to orient the Business Enterprises to the consumer behavior is realized by the Left Brain Marketing ⁸. Following this marketing philosophy three technology trends - media fragmentation, addressability, and interactivity - are converging on the world of marketing and advertising.

The left brain is considered analytic in approach while the right is described as holistic or global. A successive processor (left brain) prefers to learn in a step-by-step sequential format, beginning with details leading to a conceptual understanding of a skill. A simultaneous processor (right brain) prefers to learn beginning with the general concept and then going on to specifics.

Schmitt points out that Teradata's philosophy of collecting as much data as possible in one place - thus creating a single, compelling view of that information - makes it better suited than competing systems for

gathering and analyzing massive amounts of customer data.

In a new era of Left Brain Marketing, analytical strategies grounded in deep audience knowledge will rise to predominance: creative will remain essential but will play a smaller, more sophisticated role: the looming transformation of TV into an addressable medium marks the inflection point in the shift.

Glocal Strategies (J = CS)

Even if every case study presents its own characteristics, in general terms, it is possible to say that the European Corporate System must realize targeted glocal strategies⁹ in the following directions:

- a) to delocalize some of the Corporate Functional Areas, when the competitive gap between the European Area and the other Areas is too large;
- b) to develop, to reinvent, to reengineer the Corporate Functional Areas, when the competitive gap does not exist, or if it exists, is not too large.

The Corporate System must realize targeted strategies that can concern the localization (or the delocalization) about:

- entire enterprises (for example in the consolidated groups);
- or - in a single enterprise - about:
 - a) some Business Units (this situation concerns the multi-product enterprise);
 - b) some Business Processes [meaning as Business Process, a group of logically related activities that use the resources of the organization to provide defined results in support of the organization's objectives];
 - c) some Corporate Functional Areas.

Developing, reinventing, reengineering the corporate functional areas - where a competitive advantage may be present - means to operate, usually, on the following Core Functional Areas:

- a) Research & Development Area;
- b) Marketing Area.

The Research & Development processes are closely linked to those of Production & Logistics.

The Research & Development Area influences the Area of Production & Logistics: the Research & Development expenditure improves the Production & Logistic Area in the ways of competitiveness and productivity.

It's necessary to comment on the trade-off between the Research & Development expenditure and the GDP growth: the Nations where the Research & Development expenditure goes up have the best GDP growth: the European Area spent nearly 2% of GDP on Research and Development (Italy only 1%) and the European Research & Development expenditure remains behind the United States and Japan 3%.

A practical point of view to measure the competitive advantage is offered by the ROA ratio and their factors (ROS and TURNOVER):

ROA = Return On Assets = (NET INCOME / ASSETS).

The ROA factors are:

ROA = ROS X TURNOVER, where:

- ROS = (NET INCOME / SALES);

- TURNOVER = (SALES/ASSETS).

The ROS ratio reports entrepreneurial policies based on Margin, while TURNOVER ratio reports entrepreneurial policies based on Volumes. Observing the trend of the two ROA factors (ROS and TURNOVER), it is possible to say that:

- there is high competitiveness when both ratios go up;
- there is not competitiveness when both ratios go down;
- there is low competitiveness when a ratio goes up, while the other goes up.

By this simple way it is possible:

- a) to measure the competitive advantage;
- b) to know when the Business System must:
 - delocalize some of the Corporate Functional Areas (if the competitive gap between the European Area and the other Areas is too large);
 - develop, to reinvent, to reengineer the Corporate Functional Areas (if the competitive gap does not exist, or if it exists, is not too large).

Instruments of Corporate Social (and/or Environmental) Responsibility (K = I-CSR)

To strengthen the Cognitive & Neural knowledge (CNK) oriented to capture the consumer behaviors (presented in the previous pages), it is very important to link the Business strategies to the instruments of Corporate Social/Environmental Responsibility: also them are Instruments oriented to capture the consumer behavior.

In the wake of worldwide financial and ethical business scandals (for example the Italian cases of PARMALAT, CIRIO, FOOTBALL CLUBS, etc.) and a corresponding breakdown of public trust in commercial organizations, Corporate Governance has become a hot topic in both research and business practice around the world.

In order to restore the trust relationship that links the community to the Corporate System, it is necessary to develop the instruments of the Corporate Social/Environmental Responsibility (I-CSR). The instruments to achieve the Corporate Social/Environmental Responsibility Model, can be classified into three main groups [**with reference to Table n. 3**]:

- a) actions with main impact on the internal governance;
- b) actions with main impact on the external governance;
- c) actions with bivalent impact on the internal and external governance.

These actions are analyzed in the following pages.

a) The actions with main impact on the internal governance of the Corporate System, are:

- expression of the ethical view of the enterprise (or mission);
- promulgation of the ethical code from an ethical committee;
- creation of an internal ethical audit, presided over by an ethical officer;
- realization of activities concerning ethical training.

b) The actions with main impact on the external governance of the Corporate System, are:

- Instruments of Ethical-Social Reporting;

- Social and Environmental Accountability and Auditing.

Instruments of Ethical-Social Reporting.

Ethical-social reporting uses some instruments of different kinds:

- final reporting such as, for example, the Corporate Social Responsibility Report, or the Environmental Balance (or Eco-balance);

- preventative reporting such as, for example, the Sustainable Development Report.

Social and Environmental Accountability and Auditing.

As far as Social and Environmental Accountability is concerned there are different kinds of documents, such as, for example: SA8000 (Social Accountability 8000), ISO14000, etc..

c) The actions with bivalent impact on the internal and external governance.

The concept of e-Business is referred to the use of modern Information and Communication Technologies (ICT) linked to the development of electronics and the Internet in the modernization process of the Entrepreneurial System. The different processes of e-Business may be analyzed with reference to the various models, that the enterprise may adopt during the modernization process of the structure (using digital technologies to interact with customers, suppliers, employees, partners, competitors, and other stakeholders).

The different e-Business models are:

- the B2C model (Business to Consumers model),

- the G2B model (Government to Business model),

- the B2G model (Business to Government model),

- the B2E model (Business to Employees model),

- and, finally, the B2B model (Business to Business model).

The development of the e-Business processes (conditioning processes or causes) determines an improvement in the governance processes of the Entrepreneurial System that - using highly technological solutions - are named e-governance processes (conditioned processes or effects).

Consequently, e-governance is the second aspect of technological innovation applied to Corporate Governance processes: that is to say the possibilities for the improvement of the democratic participation processes offered by the new technologies¹⁰. These e-governance processes include the direct participation of the employees to the internal decision of the enterprises: these processes influence internal governance with activities, for example, of internal electronic polls (e-decision).

CONCLUSION

The paper has tried to discover some linkages between the Business Economics and the Cognitive & Neural Sciences and it represents a real proposal to make synergy between the two disciplines by a Theoretical Business Model that develops also the instruments of the Corporate Social Responsibility.

Now we are testing this Model in several fields (for example in Making Decision Strategies, Corporate Strategic Policies, Local Public Sector Strategies etc.): the following step will be to turn this Theoretical Model into an Empirical Model.

Tables

Table n.1 - Structure of the Excellent Business Enterprises

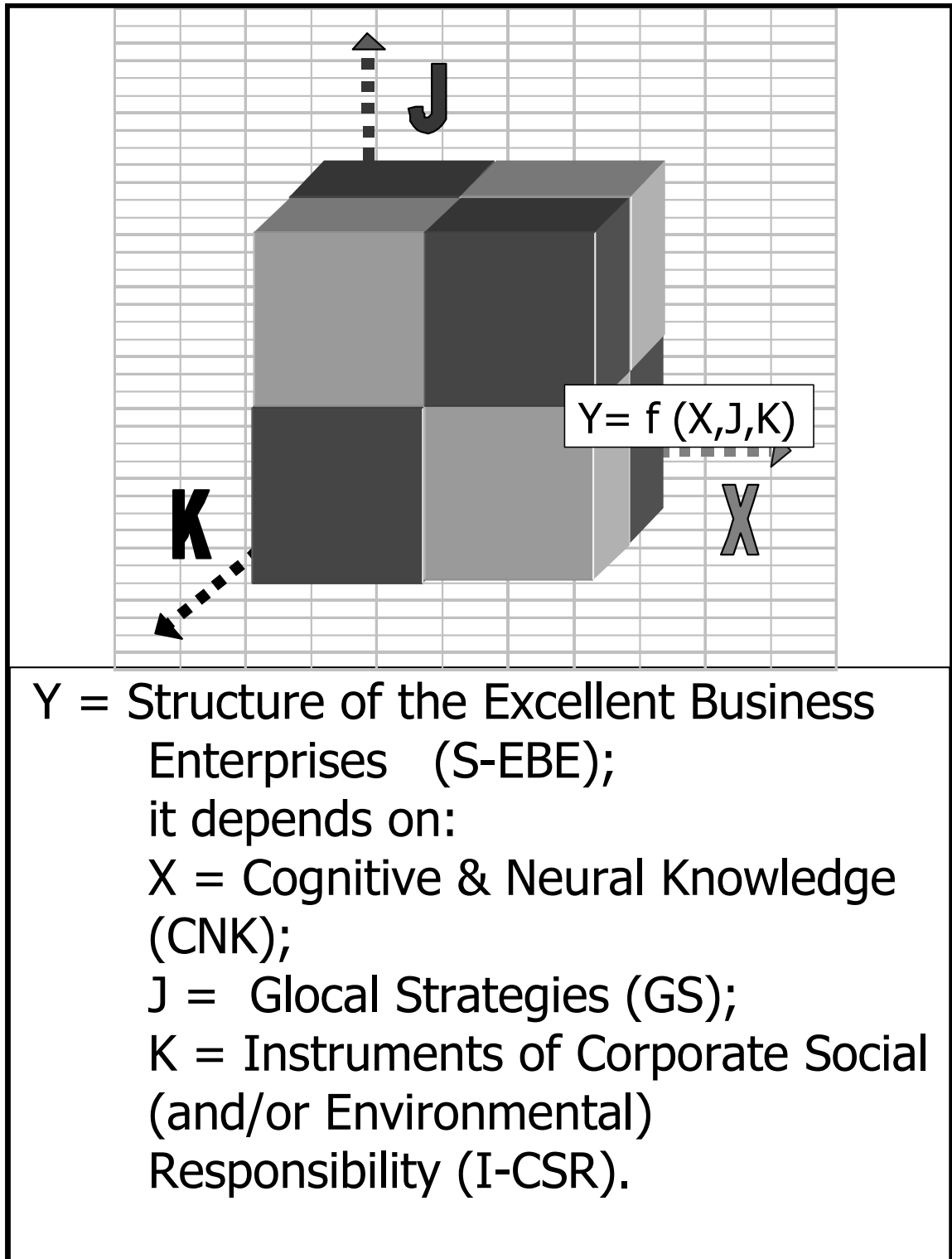


Table n.2 - The Structure of the Enterprises in a Systemic Approach

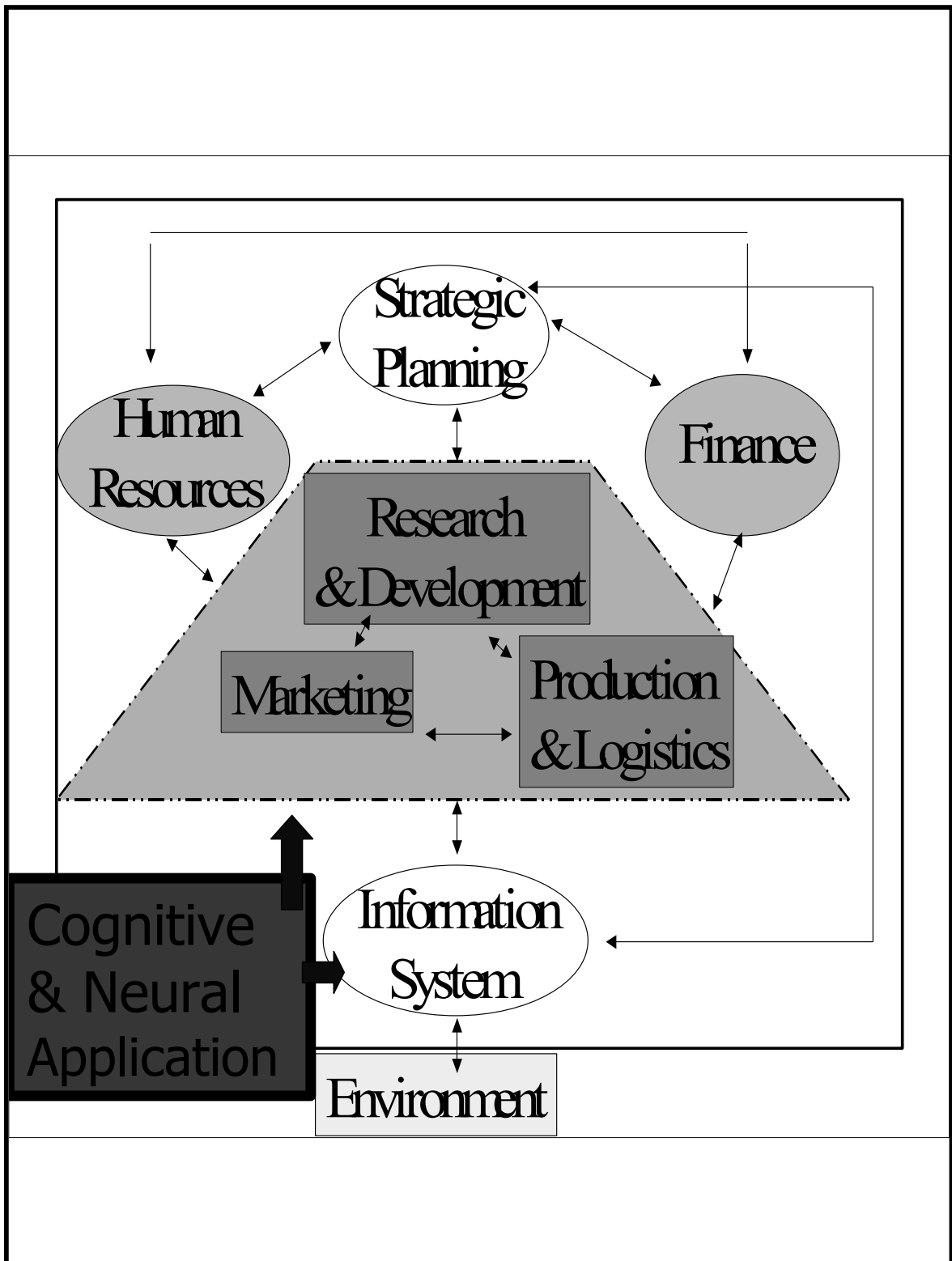


Table n.3 - The instruments to achieve the Corporate Social/Environmental Responsibility Model

<p><i>Actions with main impact on the:</i></p>	<p>A - Internal Governance</p> <ul style="list-style-type: none"> 1. expression of the <i>ethical view</i> (or <i>mission</i>); 2. promulgation of the <i>ethical code</i>; 3. creation of an <i>internal ethical audit</i>; 4. realization of an <i>ethical training</i>. <p>B - External Governance</p> <ul style="list-style-type: none"> 1. <i>Instruments of Ethical-Social Reporting, such as:</i> <ul style="list-style-type: none"> - <i>Corporate Social Responsibility Report</i>; - <i>Environmental Balance</i> (or <i>Eco-balance</i>); - <i>Sustainable Development Report</i>; - <i>etc.</i> 2. <i>Social and Environmental Auditing:</i> <ul style="list-style-type: none"> - <i>SA8000 standards</i>; - <i>ISO14000 standards</i>; - <i>etc.</i> <p>C - Internal and External Governance</p> <ul style="list-style-type: none"> 1. <i>e-Business processes (<u>conditioning processes</u>):</i> <ul style="list-style-type: none"> - <i>B2C model (Business to Consumers model)</i>; - <i>G2B model (Government to Business model)</i>; - <i>B2G model (Business to Government model)</i>; - <i>B2E model (Business to Employees model)</i>; - <i>B2B model (Business to Business model)</i>. 2. <i>e-governance processes (<u>conditioned processes</u>)</i>
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- ² The concepts of profitability and durability are clearly explained in the following publication: Ferrero, G. (1980). *Impresa e Management* (pp. 139-140). Milano: Giuffrè.
- ³ The Systemic Approach is clearly explained in the following publication: Ferrero, G. (1980). *Impresa e Management* (pp. 137-166). Milano: Giuffrè.
- ⁴ Ref.: Platt M. L., & Glimcher P. W., (1999). Neural correlates of decision variables in parietal cortex. In *Nature* (Vol. 400, pp. 233-238).
- Others contributions on this subject are:
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- ⁹ About these themes I remark the following Roland Robertson's research: Robertson R., White K., *Globalization: Critical Concepts in Sociology*, London, Routledge, 2003.
- ¹⁰ The concept of e-governance is clearly explained in the following publication: Pollifroni M. (2003). *Processi e Modelli di e-Government e di e-Governance applicati all'Azienda Pubblica*. Milano: Giuffrè.

¹ Source: European Central Bank (ECB). Monthly Bulletin, March 2005 (pp.5-7).