THE MANAGEMENT OF INNOVATION,
A CHANCE TO STRENGTHEN THE ORGANIZATION

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Abstract:
The fifth edition of the "European Innovation Scoreboard (EIS)" memoir has been handed over to the European Commission for the evaluation activities of innovative performances obtained in member states as well as in other countries (such as Switzerland, Norway, Turkey, USA, Japan). It seeks to highlight the degree of achievement of the Lisbon strategy which stipulated transforming Europe in the most advanced economy based on knowledge in order to assure an economical and job market development. Romania is thus the 32nd of the list in the top of 33 countries ranked according to the decreasing value of the synthetic indicator of innovation level $SH$.

Key Words: durable development, evaluation activities, management of innovation, organizational culture, research & development.

JEL classification: M10

INTRODUCTION

Innovation is the sole process capable of maintaining a company “in business”, which does not only imply introducing of new and competitive products, but also the implementation of the most recent technical solutions found in licensed literature. It may bring its full contribution to the transfiguration of your company into an innovative one, perfectly adapted to the demands of the ever-changing market.

During 2004-2006, the percentage of Romanian companies that have innovated products and/or processes, has reached 20%, slightly increasing in comparison to 2002-2004 when the percentage of innovative businesses amounted to 17%, according to the most recent statistic research conducted by the National Institute of Statistics. Among these innovative enterprises, 67% have applied product and process innovations, 9% have innovated only products and 24% only processes. The most important impediments of innovation have been lack of financing as well as to high innovation costs. For 2004, the total sum invested in innovation by companies amounted to 4.5 billion lei.

Of the businesses which have invested in innovation, 31% mentioned as an impediment to innovation lack of financing and 30% indicated high innovation costs. Among developing regions, the highest percentage of innovative enterprises is found in Bucharest-Ilfov (22% of the total of companies), whereas the lowest, only 4% is represented by the south-west region of Oltenia.

1. THE LISBON STRATEGY AND THE REVIVAL OF EUROPE

The European Council met on the 23/24 March 2000 in Lisbon to launch a strategic objective for the European Union in order to reinforce the percentage of job occupation, economical reform and social cohesion as part of the knowledge-based economy.

Aspects referring to innovation are explicitly discussed in two chapters: “The creation of a European area of research and innovation” and “The creation of an environment favorable to establishing and developing innovative businesses”, especially small and medium companies. Among other things, the contents of these chapters promotes the idea of a superior incorporation...
and coordination of research activities at European level in order to make them more innovative so that Europe can assuredly offer attractive perspective to high qualified “brains”.

When talking of businesses, their competitiveness and dynamism are directly dependent on the regulation context that encourages investment, innovation and entrepreneurship, and thus innovation networks must be stimulated, the interface between companies and economical markets, between research & development –R&D- and educational institutions, between consulting services and technological markets (Bratianu and Lefter, 2001).

What We understanding, what we should understand about innovation? Schumpeter (apud Drucker, 2000) identified five types of innovation:

1. new products
2. new methods of production
3. finding new sources
4. the exploitation of new markets and
5. new methods of organizing businesses

According to the documents introduced by the Communication of the European Commission COM 688/1995, innovation is defined by:

- the revival and enlargement of the offer of products, services and associated markets;
- the establishment of new methods of production, purveyance and distribution;
- introducing changes of management, work efficiency, work conditions and personnel training.

Research has highlighted that bigger companies invest more in innovation than smaller businesses. Thus, of all the big enterprises, 42% are innovative. As for medium enterprises, the percentage of companies that have invested in the innovation of products and processes is 25% and in the case of small enterprises, only 16%. The results of the National Institute of Statistics were obtained based on the data collected in June 2006, on a cross-section of 11542 enterprises of over 10 employees. The results are guaranteed by a precision of ±5%. The National Institute of Statistics has also announced that next year a new survey will be carried for the 2004-2006 period and its results published in 2007.

### 2. INNOVATION AND COMPETITIVENESS

The analysis of the degree of performance in innovation is based on a relatively big amount of factors, categorized in five groups (pointers), as follows:

#### 2.1. Determinant factors for innovation, measuring structural conditions and the innovative potential. This category comprises:

- the number of science and technological faculties graduates, aged 20 to 29 correlated to a thousand inhabitants;
- the percentage of highly educated inhabitants aged 25 to 64
- the number of broadband (BB) correlated to a hundred inhabitants
- the percentage of inhabitants aged 25-64 participating actively to the process of continuous education
- the percentage of population aged 20-24 having graduated secondary education (possessing secondary studies)

#### 2.2. The establishment of informational elements, measuring investments in activities of research & development. The elements of this category are:

- the percentage of the gross domestic product (GDP) used for the public financing of research & development activities (R&D)
- the percentage of the GDP representing the contribution of the business sector to the financing of research & development activities
2.3. **Innovation and entrepreneurship, measuring the efforts of innovation at company -level.** This category comprises:

- the percentage of small and medium enterprises developing their own innovating activities
- the percentage of small and medium enterprises collaborating;
- the percentage of innovation costs out of the total turnover;
- the percentage of GDP used for acquisitions of calculating and communication technology;
- the percentage of small and medium enterprises suffering non-technical metamorphosis

2.4. **Implementation, evaluating the level of innovation correlated to lucrative activities, workforce and of the value they add to the innovative sectors.** The factors of this category are:

- the percentage of employees working in the “high-tech” fields of activity;
- the amount of exported “high-tech” products;
- the percentage represented by the value of new products sold on the market associated to the total turnover;
- the percentage of new products for companies but which do not represent a novelty on the market;
- the percentage of workers involved in the manufacture of medium and high-tech products.

2.5. **Intellectual property, measuring results obtained during a “know-how” successful process.** This category comprises a series of factors correlated to a million inhabitants:

- the number of patents registered by the EPO (“European Patent Office”);
- the number of patents registered by the NIST (National Institute of Standards and Technology);
- the number of “triadic” patent families (registered in Europe, the USA and Japan);
- the number of registered trademarks and the number of symbols

3. **INNOVATIVE EUROPE AND ROMANIA**

Without further detailing the 12 steps methodology used to calculate a Summary Innovation Index (SII) and the result analysis, we will undertake some of the Report’s conclusions.

According to their SII, European countries can be classified into four categories:

1. highly developed countries (Switzerland, Finland, Sweden, Denmark and Germany);
2. medium performing countries (France, Luxembourg, Ireland, Great Britain, Holland, Belgium, Austria, Norway, Italy);
3. countries regaining ground (Slovenia, Hungary, Portugal, Czech Republic, Lithuania, Latvia, Cyprus and Malta);
4. countries loosing ground (Estonia, Spain, Bulgaria, Poland, Slovakia, Romania and Turkey).

The gap between countries belonging to different categories is consistent. For example, it is estimated that Hungary needs another 20 years in order to reach the European average.

- There is also an important inequality according to the SII between Europe, USA and Japan. Analyzing the dynamics of the SII, one notices that the gap related to the USA is relatively stable and is mostly caused by lower values of the pointers 1 and 3. The negative discrepancy related to Japan is increasing and is caused by differences of the pointers 1 and 5.
- Romania occupies the 32\textsuperscript{nd} place in the top of 33 countries ranked according to the decreasing value of their SII. Nevertheless, even though the values of the pointers estimated for 2005 were among the lowest, their rhythm of annual boost is proximate to the European average, leaving hope for a potential redressing.

4. INNOVATION AND INCREASE OF COMPANIES PERFORMANCES

Innovation is the only process that can maintain "in business" a company and it does not only mean to embed into manufacturing new and competitive products. By putting into effect new technical solutions found in patent literature can utterly contribute on transforming your company into an innovative one, perfectly adapted to market requirements that are always in a state of flux:

- The management of innovation consists of a complex combination of politics, practices and procedures which organize and evaluate a company’s efforts of innovation and directly depends on the promoting of an organizational culture encouraging brainstorming and creativity. All the same, innovative management is synonymous to the ingeneration and administration of internal innovative resources.

- The aspects facilitating innovation are usually of organizational nature and the most important innovative competences are intern factors. Innovative competences are present on all hierarchical levels, common to employees specialized in various domains. Nonetheless, the capacity of innovation of an enterprise does not reside in the existence of individual innovative competence but in their correlation and common use. Moreover, the coefficient of innovation of a company depends on the coordination of the innovative competences available inside the organization, yet strategically making the most of opportunities offered outside the company.

- Even though most of the innovation projects do not fulfill initial expectations concerning high profits, an efficient management of innovation will always facilitate projects leading to development and a clear outclassing of the competition. Of course, there are several success factors which must be taken into consideration, the most important being a strategic approach to the effort of innovation on the organizational level. This implies the acknowledging of the necessity of developing an adequate environment and authentic practices of innovation inside any company.

CONCLUSIONS

Finally, one can draw some conclusions:

- The increase of public financing for research and development activities is an important and necessary measure, yet not sufficient, failure being guaranteed by low investments in R&D in the context of globalization, harsh competition and informational (knowledge-based) economy.

- The value of the synthetic SII (Summary Innovation Index) is essential, yet its dynamics bears the same importance. Moreover, one must notice that, as well as any other (internationally) recognized pointer, its numerical value depends on the calculation formulas used. Thus, we believe that the analysis of individual factors may lead to more relevant/useful conclusions, and, most important, to more efficient actions.

- Romania must adopt a more active attitude regarding the reconsideration of the function and importance of innovation in its individualization as a viable partner in the European Union.
REFERENCES