

THE ROLE OF INNOVATION IN CREATING THE COMPANY'S COMPETITIVE ADVANTAGE

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Abstract

The fundamental and applied research, the technologic transfer and more particularly, the innovation work – as a component part of the said research activity – stand for aspects to which economies have, lately, started to grant increased importance. The rapid changes in the characteristics of external markets, as well as those in the technologic field are challenges for more frequent and more rapid innovations, with the end result in new products, processes and technologies. Innovation is the leading force of competitiveness, of growth, of profitability, as well as of the creation of durable values since it is well known that the competitive advantage, so much wished-for by any organization which operates in a highly competitive environment, is volatile, hard to obtain.

Key words: *innovation, competitiveness, company profitability, competitive advantage.*

JEL Classification: *E60, F23, M21*

I. INTRODUCTION

*“Innovation distinguishes between a leader and a follower.”
[Steve Jobs](#) (2011)*

Innovation is the leading force of competitiveness, of growth, of profitability and of the creation of durable values. Although it can be easily included in the product or technology development category, this refers to a fundamental challenge for the entire business, and, as such, it must stand for a continuous process. At the same time, innovation is one of the greatest opportunities for marketing specialists to leave their mark on the organization, to take fundamental endeavours based on the profound understanding of the opportunities presented by the market and the clients' needs, to overcome the functional role and to collaborate with all the company's employees, so that to be close to the strategic challenges and opportunities, with a long-lasting effect. *Fisk P. (2008)*

Economies have, lately, started to grant increased importance to the fundamental and applicative research, to the technologic transfer, and more particularly, to innovation – as a component part of the said research activity. To that effect, all documents, that represent international agreements, or all the European documents, grant a particular place to innovation which is deemed as a *driving factor of product and service competitiveness*. Innovation is found in the middle of economic growth, as it represents the key catalyst for its growth, and it thus becomes a factor of competitiveness.

The companies that have success and register the quickest growth are those that use, in their daily activity, innovative solutions, and it is particularly for this reason that a signification percentage of their income is generated by new or quality improved products and services. They shall have to prove their capacity to adapt to the changes in the business environment so as to maintain the acquired and detained positions.

Innovation refers to the commercial implementation of the best ideas, work methods and even business models for the company, thus becoming the most important component of the long-term economic growth engine. In this context, the companies' ability to innovate and, especially, to ensure the finalization of this process, influences directly the economic growth. Nevertheless, the effects of innovation are difficult to quantify due to the long period of time to convert knowledge in economic value, due to the substantial costs and the incertitude that characterises each stage of the innovation process. *Petrariu I.-R., Bumbac R., Ciobanu R., (2013)*

Peter Drucker has identified a series of fundamental sources for innovation whose putting to good value supports a company in overcoming the traditional conceptions and exploring new approaches to quickly and efficiently transform favourable opportunities in commercial reality.

- Surprise – generated by an unexpected success or failure;
- Discrepancies – they occur when things do not fit under generally accepted opinion;
- Despondency – when a better solution is imperatively necessary;
- Obsolete industries or activities awaiting a change;
- Lifestyle and demographic changes;
- Changes in attitude – changes in customer expectations and perceptions;
- Discoveries – when new knowledge and capacities offer favourable opportunities.

Business innovation is closely linked to market innovation, to companies that shape the market, renewing the customer needs, the communication channels and the rules by which they act. Also, market renewing cannot take place only at strategic level but also at tactic level, creating the adequate context, attitudes, infrastructure and appetite in order to ensure the competitive and commercial success of the best ideas. Fisk P. (2008)

The rapid changes in the characteristics of external markets, as well as those in the technologic field are challenges for more frequent and more rapid innovations, with the end result in new products, processes and technologies. The competitive advantage is volatile, difficult to obtain and even more difficult to maintain and consolidate, the consumers being the ones who, through the bias of their individual options, acknowledge the performance and grant competitive advantages, thus implicitly determining the competitive hierarchy of companies that are present on a certain market. The competitive advantage occupies the company's central point of performance on a competitive market, and innovation is a source to obtain and consolidate it.

If, initially, the meaning of innovation covered only a small part of a company's field of activity, innovation being represented by an idea/ a practice/ a product recently developed and adopted by a company, later on, in accordance with the amplification of the competition and perception of innovation as an important source of creation and affirmation of the competitive advantage, one could notice the opportunity to extend the proficiency field *from* the achieved products *to* the means to obtain such products. Thus, all activities that play a part in obtaining the product within the limits of a company have been implicated in the competitive struggle. Lăcătuș S. (2010)

II. COMPETITIVENESS – ASPECTS AT MACRO AND MICRO-ECONOMIC LEVEL

In the past decades, the quantification of the national competitiveness level represented a continuous concern of some institutions and organizations that share global pursuits. Within such a framework, the *International Management and Development Institute* and the *World Economic Forum* stand out, organizations that undertook the establishment of a classification of the most competitive states, depending on the growth competitiveness index and of the business competitiveness index, the world states occupying certain places depending on certain criteria considered as significant in the general development of a country.

The criteria taken into consideration when quantifying the countries depending on their level of competitiveness target the *economic performance, the efficiency of the governmental policies, the efficiency of the business environment and the infrastructure level of development.*

✓ As concerns the *economic performances*, they shall be approached depending on the current prosperity of a country, also reflected in its past performances; the competition managed by market strength ensures the nation's long-term performance; the country's openness towards international economic activities, etc.

✓ *the efficiency of the governmental policies* implies minimizing the state's intervention in business activities, while setting some macro-economic and social conditions that encourage loyal competition and minimize the risk for the companies. Also, governments must be flexible in their activity, adapting their economic policies according to the changes occurring at the international environment level, while, at the same time, ensuring fairness, justice and security for the population.

✓ *the efficiency of the business environment* considers the financial-fiscal facilities which can offer competitiveness increase; a financial system well-developed and integrated at the world level which supports national economic competitiveness; maintaining a high level of living requires the integration of the internal economy within the world economy, and training the work force, increasing productivity and, in general, developing an attitude towards work, contributes substantially to the national competitiveness growth.

✓ *Infrastructure* also plays an important role in assuring an internal and international competitiveness, as it targets both the development of traditional infrastructure, but also the development of the technological and informatics one. The latter, implies the allocation of some substantial investments in the research, training, education and human resources activity. The two indexes (*Growth Competitiveness Index –GCI* and *Business Competitiveness Index- BCI*) combine the data available within the annual survey carried out by the World

Economic Forum on a sample of over 100 countries and over 8.000 business leaders belonging to these countries.

In order to synthesize the information supplied by the two indexes of competitiveness (GCI and BCI), they are grouped depending on defining elements such as: macro-economic stability, the relation of public institutions/ private companies or the technological progress that determines the long-term economic growth.

The main difference between the developed economies and the poor ones derives from the fact that the former produce more and better goods and not from the fact that in some economies the consumption is greater than in other, as it is often considered. In light of these findings, we can state that, on the long-term, economic growth is not possible without an improvement of technologies. From this point of view, the studies carried out by analysing the two indexes of competitiveness (*Growth Competitiveness Index* and *Business Competitiveness Index*) split the countries in two categories: "innovative" countries (the economic growth is determined by their special innovation capacity) and "imitative" economies (that mainly depend, from the technological point of view, on the acquisitions in the field from abroad). *Radu L. (2007)*

Europe makes up for the gap in the innovation field in comparison with the **United States** and with **Japan**, in the general classification within the EU, **Sweden** is in the first position, followed by **Denmark**, **Germany** and **Finland**, these four countries are the ones that invest the most in research and innovation.

Specifically, the Innovation Union Scoreboard, 2014 edition places the states members in four different performance groups: Denmark (DK), Finland (FI), Germany (DE) and Sweden (SE) are "innovation leaders" innovation performance are well above the EU average; Austria (AT), Belgium (BE), Cyprus (CY), Estonia (EE), France (FR), Ireland (IE), Luxembourg (LU), the Netherlands (NL), Slovenia (SI) and the UK (UK) are "innovation followers" with an innovation performance above average or close to the EU average; Performance Croatia (HR), Czech Republic (CZ), Greece (EL), Hungary (HU), Italy (IT), Lithuania (LT), Malta (MT), Poland (PL), Portugal (PT), Slovakia (SK) and Spain (ES) is below the EU average. These countries are "moderate innovators". Bulgaria (BG), Latvia (LV) and Romania (RO) are "modest innovators" with innovation performance significantly lower than the EU average.

Most innovative countries have good results and visible above the EU average in all areas: from higher education system and research, through innovative commercial activities and Intellectual assets, to innovation within SMEs economic effects, reflecting national research and innovation systems in balance.

Internationally, South Korea, USA and Japan go beyond the EU's performance in innovation. If the gap relative to the US and Japan has halved in recent years, the gap with South Korea increased. (EC - Innovation Union Scoreboard 2014).

Romania is part of the last group of European countries with reference to competitiveness growth, as it is shown in the European Committee Report, together with Bulgaria, the Czech Republic, Poland, Hungary, Slovakia, Latvia and Lithuania. Besides, in a document dated in the month of May, the EC described Romania as having a low general economic competitiveness. The main challenges are the under-developed transportation infrastructure and TIC infrastructure, the weak business environment and the low support granted to research and development. The Romanian main infrastructures of transportation and broadband connections are under-developed and continue to represent an obstacle in the process of growth. The amplitude of research and development is extremely low, while the research and innovation system is very fragmented and there are few connections between education, research and companies. The ruling measures that change quickly, the cumbersome regulation environment and bureaucracy have a negative effect on the business environment. The increase of the energetic efficiency (Romania is the third most energy-intensive economy) shall be crucial for the industrial competitiveness.

The decreasing competitiveness of Romania, as compared to international level, reflects a failure of policies, especially because the main changes in order to improve the business environment have been postponed, as of the present moment, more national strategies are in the process of being drafted and they aim to consolidating competitiveness in fields which are important for growth, still, actual application is required for visible and long-lasting results. (*The European Committee..., 2013*)

At the micro-economic level, competitiveness can be evaluated through company profitability. When studying competitiveness, it has been equivalent to the competitive advantage, meaning that the company creates some products or provides services that are superior from that point of view that is significant to the consumers, in comparison with the offer of similar products from the majority of competitors. Experience demonstrated that the competitive advantage is difficult to maintain and to consolidate, as it fundamentally results from the value that the company can create for its buyers. It can come under the form of prices that are lower than those of the competition for equivalent benefits, or as the supply of unique benefits that do more than make up for the price increase. *Radu L. (2007)*

The main aspects of assessing the level of performance of a company that refer to the global efficiency of the economic activity are: the economic efficiency, the achieved and planned performance, product competitiveness or company excellence. In conclusion, competitiveness is the quality of an economic agent, of a product or service, of an individual person or of an activity to be liable and capable to face the competition. At

the company's level, a series of competitiveness categories can be identified: global, financial, commercial, human, managerial, technical, organizational. *Lăcătuș S. (2010)*

Therefore, we can consider competitiveness as the economic capacity of a company to cope with an effective or potential competition. Competitiveness can be assessed depending on several elements, such as: price, product quality, post-sale services, proposal flexibility and versatility. Of all these elements, the most important are product price and product quality. At the same time, according to a well-known definition from the American speciality literature, the competitive advantage can be obtained either by reducing costs (which could result in a decrease of the sale price) or by the product quality differentiation. *Porter M. E. (1998)*

III. INNOVATION – A KEY ROLE IN THE COMPANIES' FUTURE

The organization's motivation for innovation appears in multiple forms, for instance: market share increase, acquisition of a new market, improving product quality, enlarging the product range, replacing outdated products, reducing the impact on environment, etc., it acts systemically, and it contains all the company's activities (from research-development to the personnel's activity), all the company's functions being under the impact of innovation. The results of the innovation activity can be observed in achieving products with improved quality characteristics, services with superior quality, new, more efficient and cleaner (ecologically) production processes, improved models of business management system, modern methods of work force management, etc.

Under the circumstances of the technological change rhythm acceleration, of the competitive pressure increase, and against the changes of the consumer's exigencies, of those customers who request, in an increasingly shorter period of time, a variety of new personalized, high quality products, at a low price, products that assure and grant safety in exploitation, a traditional company cannot cope with such challenges. Hence, only an innovative company, based on information and knowledge, shall be the *company of the future*, flexible and able to register performance, characterized by: a high degree of perceptiveness to request fluctuations; flexibility and the capacity to quickly adapt both to the variations regarding the nature of materials and to the conditions of their processing, as well; the capacity to produce an extended range of quality products, with low costs and in a short period of time; the ability to successfully integrate new technologies in the existing system, with a minimum down time and cost. *Lăcătuș S. (2010)*

According to a recent Eurostat study, at the European level, Germany, Luxembourg and Belgium are the countries with the highest percentage of innovative companies. The study contains companies with more than 10 employees from the field of industry and services, and the questions referred to the way in which they have optimized different items in their activity, from product development to marketing and distribution.

At EU level, almost 53% of the companies included in the study reported innovation in their activity in the period 2008-2010. The countries that are best situated are Germania (79% of companies reported innovations in their activity), Luxemburg (68%), Belgium (61%), Portugal, Sweden and Ireland (60%). At the other end, there are situated countries such as Bulgaria (27%), Poland (28%), Latvia (30%) and Romania and Hungary (31%). The research also included the future probable EU member states: Croatia (with 42% of companies that reported innovations), Serbia (52%), Turkey (51%). (*The most innovative companies from the EU are in Germany, 2013*).

In **Romania**, the investments in research and development, both in the public and in the private sector, are very low, which leads to our country being considered a "modest innovator", and occupying the 26th place out of 27 member states, according to the Union's chart related to the innovation for the year of 2013. The results in the innovation field have degraded in the period 2010-2012 (-51%), thus slowing the convergence movement. The number of IMMs that innovate internally and bring in technological innovations remains much lower under the EU average, and it is still decreasing. Also, the number of IMMs that adopt non-technological innovations is under the EU average.

A series of stimulants has been introduced in order to consolidate the research and innovation capacity. A system of innovation tickets became operational in 2012. Tax deduction for investments in research and development increased in 2013 from 20% to 50%. In addition, a new strategy for research, technological development and innovation for the period 2014-2020, which is in the process of being drafted with reference to the competitiveness strategy, should assure a larger integration and coordination between the research, innovation policies and the industry.

To this effect, as it has been emphasized by the Commission in the recommendations that are specific for each country in 2013, as well as in the work document that accompanies the Commission's services, the main challenge consists in granting priority to the research and development activities which have the potential to attract private investments.

At the same time, additional efforts shall be necessary in order to translate the knowledge into the production of goods and provision of services, and in order to improve the research climate in the private sector and in innovation, equally. There is still a series of challenges, especially regarding the improvement of the

harmonization of the research and innovation capacities with the needs of the companies, the increase of the companies' research and innovation capabilities, the making available, to the IMM, of some high quality personalized innovation services, thus becoming an incentive for the creation of knowledge based companies by means of adequate support and financing measures to help develop and launch the product, as well as to create stimulants for the collaboration between large companies, innovative IMM and universities. (*European Committee..., 2013*)

At the level of the domain of activity, the companies belonging to the *technological field* remain on the first position regarding innovation, according to a study *The most innovative companies of 2013* carried out by Boston Consulting Group. Apple Inc occupies the first position, for the ninth consecutive year, followed by Samsung Electronics Co and Google Inc. Meanwhile, companies such as Intel Corp, Dell and Royal Philips NV dropped at least 11 positions.

In the *Top 50* report, 14 positions are occupied by *vehicle manufacturers*, and in *Top 20*, there are nine companies. In 2010, only eight motor-car companies were situated in the top of the most innovative companies. Toyota Motor Corp, Ford Motor Co and BMW AG have been among the 10 most innovative companies. General Motors Co jumped up 16 positions in this year, and made it to number 13, while Volkswagen AG jumped up 31 positions and made it to number 14. AUDI AG, Honda Motors Co and Daimler AG also had strong results this year. (*The most innovative companies, 2013*)

See below **the first 20 most innovative companies**

1.	Apple	11.	Sony
2.	Samsung	12.	Facebook
3.	Google	13.	General Motors
4.	Microsoft	14.	Volkswagen
5.	Toyota	15.	Coca-Cola
6.	IBM	16.	Hewlett-Packard
7.	Amazon	17.	Hyundai
8.	Ford	18.	Honda
9.	BMW	19.	Audi
10.	General Electric	20.	Daimler

Source: **Error! Hyperlink reference not valid.**

The results of this report have been determined based on a survey, with the participation of 1500 executive directors.

All these companies have taken into account in obtaining the competitive advantage, both external sources (changes at demand, price, technology, etc. level) and internal sources (creativity and innovation).

In relation to the role of external factors in creating the competitive advantage, this does not occur passively but results from the company's ability to respond to changes occurred at a certain time. Any change in the external environment brings the company new opportunities to create business profit, therefore the response to changes and opportunities is an attribute of strategic management, of "top" managers. The response to change also includes anticipating changes over time, so that companies have to change their strategy and take into account their capabilities as future success factors.

Regarding the internal sources, they refer to new means of approaching the business, to technical aspects regarding new ideas for product achievement in implementing new technologies. Innovation requires more imagination, intuition and creativity than a deductive analysis.

Resource environment heterogeneity changes have a different impact on companies, accordingly some firms respond more quickly and effectively to changing opportunities and constraints.

McKinsey [1980] points out that innovation refers to Reconfiguration Company, rearranging "value chain", changing the rules of the game, so it is necessary for the company to capitalize distinct competencies and create barriers to protect the advantage created. The competitive advantage created must be supported, not to erode the competition.

IV. CONCLUSIONS

The 2020 European Strategy aims to assuring an economic development to be *intelligent, durable and favourable to the inclusion process* by insisting upon the creation of work places and upon reducing poverty. The purpose of the strategy is to reach an economy based on knowledge, a larger concept that integrates **innovation, informational society and human capital**.

The knowledge economy places at the centre of the innovation system the innovative the knowledge economy places at the centre of the innovation system the innovative enterprise whose technological and

knowledge investment decisions, and therefore the associated behaviour, are the engine of the economic development. At the level of the innovative type organization, the benefits resulting from innovation are set based on the perceptions on the consumer's preferences with reference to the costs with manufacturing traditional goods at the average level of the rate of profit on a given market, and they initiate the innovation process based on its market strategies. Furthermore, building a knowledge-based economy became a rational purpose for any state, as it represents the road to economic competitiveness, growth and prosperity.

Please notice the extraordinary importance, for all companies, that the quality of the business environment is strongly correlated to their tendency towards innovation; the specialty literature identifies a number of factors that leads to building an innovation favourable business environment: an educated work force and capital; the existence of a potential request: young and educated population, purchase capacity and human development level, inclination towards business investments; modern, orientated towards innovation entrepreneurship: awareness, innovation management, TIC adoption, electronic commerce; innovation need and usefulness awareness; innovation management based on the administration of intangible assets and the understanding the of role of a highly trained work force and of participatory work relations; TIC adoption and electronic commerce. (*Innovation based competitiveness of the Romanian economy in the context of the Lisbon Strategy, 2004*).

As part of a vast literature, the OCDE – 2003 study shows that “the entrepreneurial activity contributes extensively to innovation and to the adoption of new technologies, and, ultimately, to productivity increase. New technologies are often more efficiently implemented by creating new enterprises and restructuring the existing ones, both factors being highly dependable on the entrepreneurial environment”. In its turn, it requires modern business management approaches. Building a knowledge-based economy became a rational purpose for any state. It represents its road toward economic competitiveness, growth and prosperity.

Economic science shows that a sustainable increase cannot be achieved only by investments and by assuring stability in the macro-economic environment, if they are not backed-up by technical progress which amplified the value of the capital and of the work force. Therefore, change, from resource exploitation to knowledge exploitation, represents the touchstone of the jump from cost based competitiveness to final value based competitiveness.

Unfortunately, Romania does not have the time to wait. In its fight for integration in the European Union, Romania needs to concentrate its resources on real convergence. Without decisive actions and policies, Romania shall need approximately 80 years to reach the income per EU metropolis. Such a rhythm cannot be accepted and, therefore, the only solution available for Romania is to skip stages and to force an accelerated growth line. Such a policy must start from stimulating innovation, research-development activities as instruments of the jump to other increase levels that shall finally turn Romania into a competitive economy.

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