INVESTMENT – AN ESSENTIAL ELEMENT OF INNOVATION

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ABSTRACT

In this article the author presents a subject of current interest by discussing, referring to the importance of innovation in the evolution of the industry and individual companies. We will see how innovators depend on competitive forces on the market and also by other factors from institutional and socio-economic environment. Therefore, it's absolutely necessary for government, local and central authorities same as organizations management to pay special attention to innovation as a driver of growth, competitiveness and the improvement of life standards. Innovation is a multivariate and complex activity; it cannot directly be measured using a single-item.

KEYWORDS: Development, Innovation, Investment, Management, Research.

JEL CLASSIFICATION: 0120, 0320, D920, C440.

1. INTRODUCTION

For a company innovations could be creating dynamic products, improving existing services, implementing new ideas. Innovation can be a catalyst for the growth and success of the business, and help for adapt and grow in the marketplace. An innovative company does not have to invest to become more competitive in the market. The company can change the business model and adapt to changes in the environment to deliver better products or services. Successful innovation should be an in-built part of your company strategy, to create a culture of innovation and lead the way in innovative thinking and creative problem solving; this is the definition of innovative companies.

Innovation represents the specific tool of managerial and entrepreneurship system. Studies and research (OECD, 2007) activities during the last decades have shown that technological innovations have contributed to productivity growth, the economic development and life standard growth of nations to a certain degree of 50% in industrialized countries.

The managers have understood, both from here as well as abroad, that if they want to maintain the leadership must to carry on a struggle for proper analysis of the way in which innovate and apply innovation. As we know that 84% of managers agree with the fact that innovation is important in company's performance and that only 6% of them are satisfied with their performances in innovations (Biz Magazine, 2015), we know as well how it will change the situation: by learning what is the meaning of innovation and being kept up-to-date with the news and it supposed to be appropriate for your company (Drucker, 2006).

2. INNOVATION IN DEVELOPMENT PROCESS

The innovation cycles are becoming more and more short which means that big companies have to be up-to-date with innovation and in the same time have to come with new products, services and ideas.

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Giving a definition to the concept of innovation is a hard thing because the innovation term is used in so many different ways and varying circumstances. Many of these overlap and most are enough contradictory. Innovation differs from invention. Innovation means successfully deployment – in most cases this means trading success – of a new product, service or process. The distinction between product innovation and process innovation is also difficult because of the fact that one of them generally leads to the other. The new technological processes allow the development of new products while the massively manufacture of new products often requires innovation on process line. Also, when new products are used as raw materials it can contribute to the way in which are manufactured end products included too.

The newest definition in dictionaries from Romania shows us a technical or organizational discovery that represents a novelty put in practice in order to increase the labor productivity (Dexonline, 2015). Innovation is also defined as a purchase or new achievement entered into a branch of activity.

In the book Innovation and Entrepreneurship, Peter Drucker has defined innovation as one's manager specific tool, the way by which it exploits change as an opportunity for various business or different services.

Innovation should be part of any business as procedures and a requirement for employees in their evaluation. It can be defined by essential improvements, but also revolutionary. In a Harvard Business Review interview, Katsuaki Watanabe of Toyota said: "There is no genius in our company. We just do whatever we believe is right, trying every day to improve every little bit and piece. But when 70 years of very small improvements accumulate, they become a revolution." (Harvard Business Review, 2007).

The factors that contribute to the completion of your creativity are divided into two broad categories (Gheorghe, 2010) – mind and thinking – they are also terms of knowledge, production and evaluation. Production terms appear as a result of divergent and convergent thinking, the last one having a critical part in creation's area.

In figure 1 we have shown schematically how they proceed on the innovative process within the framework of a company.

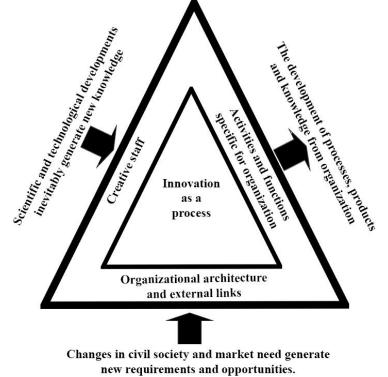


Figure 1. Factors that contribute to the emergence of innovation *Source*: authors

"Management and Innovation For Competitive Advantage", November 5th-6th, 2015, BUCHAREST, ROMANIA

In the recent years, the analyses have demonstrated that the old tools and approach no longer will work, mainly from the following causes (Bogdan, 2008):

- resources involved in the innovation process are multiple (no just about money and investments);
- innovation process in non-linear;
- there are innovation in services area which presents an array of features;
- Innovators depend on competitive forces on the market and also by other factors from institutional and socio-economic environment.

The increasing pressure on the need for innovation is driven by cycle's shorter lifetime of the products, the growth of piracy and the transition from the more industrialized economy to the knowledge-based economy. The changes taking place in the patterns of innovation, already visible in the work environment, flexible working schemes include outsourcing and a growing number of professionals as a freelancer. Observe the changes in the patterns of innovation according to geographical area and a shifting of the Centre of gravity towards the developing countries. Innovation knows a quick acceleration in these countries and is determined by the cost advantages.

3. GLOBAL INVESTMENTS FOR INNOVATION

At the organizational level, in order for innovation to become reality, it must be supported by two decisive factors: Innovative-whose profile is characterized by the determination with which aims to solve problems-and Sponsor-the one who is able to identify the value of a project before it is implemented and is persevering in promoting change. From the interaction of these two factors results in a framework of innovation. While this framework, most of the time, is given to mark the phases, requirements and how innovation can be encouraged.

Booz & Company (2013), the global consulting enterprise in management, has carried out a study on innovation attended by 1.000 of fellowships from worldwide. According to the results of the "Global Innovation 1000" study, published in October 2013, the costs incurred in the R&D field (Research & Development) have increased by 5.8% in 2013 compared to 2012, which anticipates a long-term economic growth. At the regional level, companies headquartered in China have increased by 35.8% the innovation budget and added 50% more companies among Global Electronica 1000, in the range 2012-2013, more than any other major country.

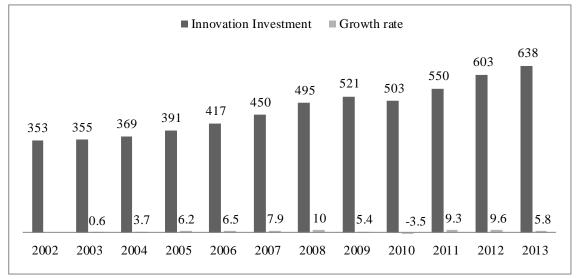


Figure 2. Innovation Investment *Source:* adapted from Booz & Company (2013) "Management and Innovation For Competitive Advantage", November 5th-6th, 2015, BUCHAREST, ROMANIA

One in five companies introduced or implemented a product, process, method of organizing or marketing, new or significantly improved. The advantages of time advance has been established the main method for maintaining or improving competitiveness in innovative enterprises.

Another reason that innovation is vital belongs to expectations of customers, which are getting bigger day by day. Today customers are out of patience with the obsolete products. It was a time when people were buying a product and gave it up only after decades, in case it breaks. Nowadays, they give up to a product because of boredom.

In figure 3 we'll show which the biggest investments industries are. In the year of 2013, investments have been globally made on innovation by 638 billion dollars. More details could be seen in the following figure:

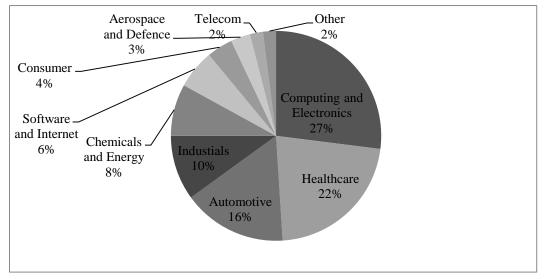


Figure 3. Industrial investment *Source:* adapted from Booz & Company (2013)

About 90% of global expenditures for innovation were made by companies headquartered in North America, Europe and Japan. In Europe the budget allocated to innovation has increased by 4.5% the ongoing economic pressures. In Japan, the amounts dedicated to the research and development field have dropped by 3.6% in 2013, for the first time since the 2008-2009 recession. The industries which have benefited by funds for innovation in 2013 remain computers and electronics, healthcare and automotive. Cumulatively, the budget allocated to the three industries represents 65% of the total budget for innovation in 2013.

At the macro level, innovation is measured by the manner in which a feature of a service or product of the company generates a novelty in surrounding world, on the market or in the industry. At micro level, this is measured by the novelty product or service for the company or for the customer. In the first case, it is about the factors externally induced, as well as the level of familiarity of innovation in perspective of the audience and of the industry. In the second case, innovation is the new element brought a product of a company and a category of customers of the company.

In macro innovation, close gaps resulting are not dependent on the strategy or structure companies, the knowledge base or the availability of resources (for example, the World Wide Web). In the case of micro innovation may appear gaps in the strategy of marketing or research and development of the company, in the supply chain or distribution or even on the sales area.

However, capacity for innovation of a product shall be conditional upon the company's capacities and powers. Close gaps resulting from here will depend on the strategy or structure of the company, the powers, and the base of knowledge or resources. Innovation can develop in the real world in the same way as in our minds, leading to a new reality. Innovation is omnipresent and does not leave anything untouched.

The innovation cycles are becoming more and more short which means that big companies have to be up-to-date with innovation and in the same time have to come with new products, services and ideas. The clients of now just don't want a product or a solution. They demand companies to resolve their problems! There can be one conclusion: to survive in this global jungle of competitiveness, the only option of companies is innovation.

In other words, preparing for the future innovation, investing in productive research and educating employees to understand organizational purpose are all related - and their common denominator is leader behavior.

4. INNOVATIVE INVESTMENTS IN ROMANIA

If in 2012 Romania was on the last position regarding the investments in innovative fields, in the year of 2014 it has managed to advance two countries such as Bulgaria and Latvia. In figure 4 we'll present the performance of the European Union countries on innovation.

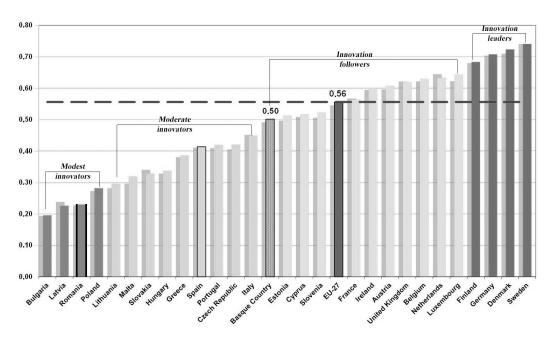


Figure 4. EU Member States' innovation performance Source: adapted from European Commission (2015)

Innovation plays an important role in the development of economy and the population of a country. When a county innovate and pull money in this domain, automatically the company and investors will come to develop new business.

Romania must begin to invest increasingly more money into innovation at all levels, because this is the future and all the statistics don't look good for the country. Innovation must be developed by a very well planned strategy. It must be developed after consultation with local business and leaders. Romania needs to create a culture of innovation in all sectors.

The most important field for invest remain education. When a country is educated is very powerful, because the population is strong and can compete with anyone.

The innovation study in business is up-to-date, so we can start with asking ourselves which is the level of innovation in companies in Romania.

Innovation in businesses in Romania has recorded a decline in the period of 2010-2012 compared to 2008-2010, so that only 4 of 10 big companies and 2 of 10 small and medium-sized companies have implemented a product, a process, a new or improved organizational and marketing methods. The investments situation in the innovative field in Romania could be seen in Figure 5.

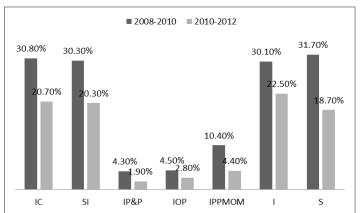


Figure 5. The share of innovative enterprises in the total business

Source: adapted from National Institute of Statistics, Innovation in business enterprises, Press release, number 178 (2014, p.2)

Legand for figure 5

Legend for figure 5	
IC = Innovative companies	IPPMOM = Innovative products and / or
SI = Successful innovators	processes and methods of organization and / or
IP&P = Innovative products and process	marketing
IOP = Innovative organizational or marketing	I = Industry
	S = Service

From the survey results on innovation in enterprises, in the period of 2010-2012, the share of innovative enterprises was 30%, down from 2008-2010.

Innovative enterprises of organizational or marketing methods have recorded a share of 27.7% with 7.7 percentage points down compared to 2008-2010 period when their share was 35.4%.

During the period 2010-2012 through the total of enterprises with innovative products and/or processes, 9% of them were innovators of products and processes, 3.6% were only innovative processes and 1.8% was only innovative products. From the total of enterprises with innovative organizational and/or marketing methods, 13.2% have implemented both methods of organization and methods of marketing, 7.3% have only implemented methods of organization and 6.8% have introduced new methods of marketing. More details could be viewed in table 1.

Table 1. Typology of Ir		
	The number of	Share of total
	enterprises	enterprises (%)
Total businesses	19800	100
Innovative companies	5968	30
Companies innovative products and/or processes	1806	9
Innovative enterprise products only	351	1.8
Only innovative enterprises processes	706	3.6
Enterprise innovative products and processes	115	0.6
Enterprise innovative organizational methods	5427	27.7
and/or marketing		
Innovative companies only organizational methods	1446	7.3
Only innovative companies marketing methods	1354	6.8
Enterprise innovative methods of organization and	2627	13.2
marketing		

Table 1. Typology of innovators

Source: adapted from Sentiment Analysis: Past, Present and Future, Retrieved October 10, 2015, from https://channels.theinnovationenterprise.com/channels/analytics

According to the type of implemented innovation (regardless of other innovations) during the period 2010-2012, most innovative enterprises have implemented 14.1% methods of organization and 13.8% methods of marketing. The share of innovative enterprises by products was 3.4% and 4.6% for processes. All information is presented in figure 6 "The share of innovative enterprises in total enterprises by type of innovation".

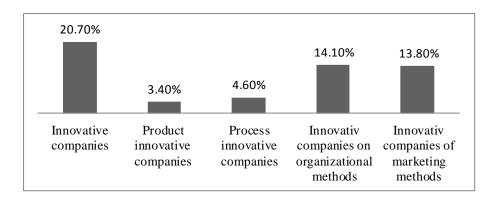


Figure 6. The share of innovative enterprises in total enterprises by type of innovation *Source:* adapted from Innovation statistics, Retrieved October 10, 2015, from http://ec.europa.eu/eurostat/statistics-explained/index.php/Innovation_statistics

Following research and interviews with managers and employees have come to the following conclusions:

- a company to innovate needs to invest heavily in research and development department;
- a small business must work in collaboration with other companies to be productive locally and internationally;
- large companies must engage young people in innovative departments and in strategic position;
- start-ups are more innovative than large companies because bureaucracy is non-existent;
- KPI performance measurement must be developed for the innovation activity.

5. CONCLUSIONS

The current policy of Romania in the fields of innovation and research and development should follow the objectives set by the European Union. An urgent necessities formation of a new mentality on the innovation and development of this process in the economy by implementing creative intellectual activity results.

The Romanian government should stimulate Research & Development activity and play an important role in developing and supporting national science and engineering. These investments in Research & Development should be accompanied by extensive investments in education and training at all levels of society. Often the only long-term effects yield a return on investment in Research & Development. Therefore there should be a public activity to finance Research & Development, which is why science is a public good.

Romania is in a continuous state of transition, and research, development and innovation system's in a state of crisis. It should be established as a national priority, national innovation system.

Innovation policy must not be under the control of a group of industrialists, but it is a "team game", to be attracted various factors: small and medium enterprises, universities, public sector, competitors, collaborators, etc. Innovation policy must take into account all the factors involved, and the interaction between them, conditioning the general framework for optimal deployment of innovation determines the behavior of these factors.

The actual realization of creative potential will not be able to realize unless the creators will have good working conditions that offer them safety: the certainty that can participate to the achievement of objectives; the results of their creative activity will be assessed and valued through implementation in the economy.

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