

STUDY REGARDING THE EVOLUTION OF INNOVATIVE ENTERPRISES IN ROMANIA

Suzana DEMYEN¹
Jeanina CIUREA²

ABSTRACT

During the years, economists turned their attention to the small and medium sized enterprise, but also they focused on the importance of innovation for the future progress of a company. The complexity of the innovation process was explained in several works in literature. The present paper focuses on the issue of innovative enterprises in the case of Romania, the case study analyzing the representative data in this regard.

KEY WORDS: *performance, organization, innovation, innovative enterprise*

JEL: *O30*

1. INTRODUCTION

Scientific and practical progress has become a necessity for any developed or developing country, with innovating enterprises playing a very important role in determining the level of progress. Innovation-driven companies, as mentioned in official reports, "are recognized as a driving force of modern economy" (United Nations, 2012).

Speaking of innovative companies, we can refer to them from the point of view of those enterprises that "have introduced a significantly different product from the previous ones" (Statcan, Cordis) or have implemented a new, more advanced technology than those used in the rest of the years.

The approaches in literature mention the concept of „innovative enterprise”, defining it as the entity that in a certain period of time (Băloiu, Frășineanu, (2004) mention three years), adopted either products or new technologies "specific to the knowledge-based economy", highlighting new ideas.

Even though some countries, more traditional by nature, still exhibit an increased level of reluctance in accepting the concept of new or the change, we can not ignore the fact that attention is focused most often on the efficiency of the working processes, respectively the optimization of the use of the resources any kind, within organizations. As the literature confirms, "innovation requires the strategic allocation of resources to developing and using productive resources" (Lazonick, 2013).

Although human physical work has been replaced or at least complemented by machinery and even artificial intelligence, this has contributed to "increasing the level of competitive pressure" (Șipos, 2004), amid a stronger dynamism of consumer exigencies.

¹ Assistant PhD, "Eftimie Murgu" University of Resita, Faculty of Economic Sciences, s.demyen@uem.ro

² Lecturer PhD, "Eftimie Murgu" University of Resita, Faculty of Economic Sciences, j.ciurea@uem.ro

2. THEORETICAL BACKGROUND

"Innovation has been studied in a variety of contexts" (Bigliardi, 2011). The notion of innovative enterprise, on the other hand, is often associated with automation, the concept reducing the significance of the level of active involvement of the human resource, amid the amplification of the importance of mechanization and technology of all work processes. According to Dimov (Dimov, 2017), they have the "ability to generate, create, develop, transfer and integrate knowledge in the form of new products, services and processes".

Even if "there is no single, official definition of "high-growth, innovative firms", official reports state that "the scale of their presence is considered to be an important measure of business dynamics in a country" (Vertesy et al, 2017).

The level of innovation cannot be considered to have the same implementation framework in SMEs as compared to large enterprises. Some enterprises are more innovative than others, the explanation being found in a system of 7 factors (Băloiu, 1995), as follows:

1. The level of opening to the business environment
2. Human Resources
3. Technological resources
4. Financial resources
5. Organization of the enterprise
6. Adopted strategy
7. The management

However, other authors mention as the main determinants of innovation: the long-term vision, the ability to adapt to new technologies, the existence of an organizational culture that allows the adoption of innovative processes, the level of management commitment, the ability of employees to capitalize on individual capabilities to maximize performance in activity.

Different criteria regarding growth can determine different micro and macroeconomic results (Kolar, 2014). Literature states a competence profile of innovative enterprises, as follows:

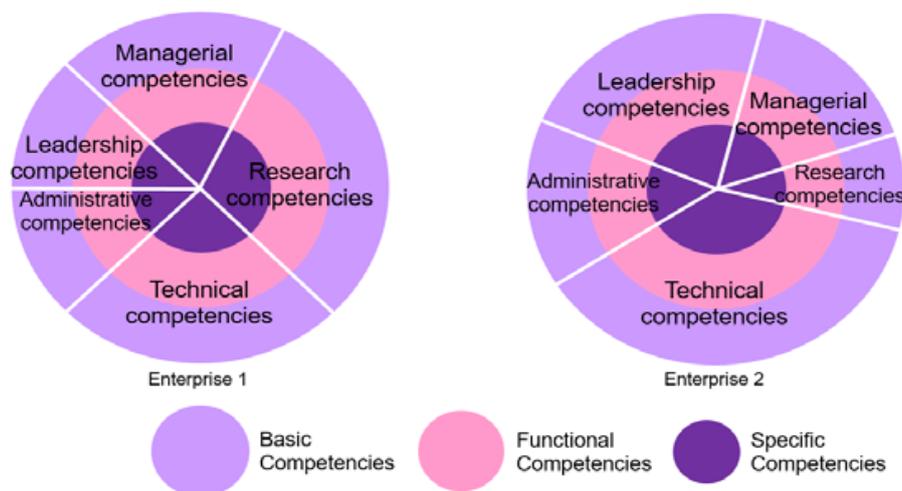


Figure no. 1
(Source: Dimov, 2017)

From the point of view of management, it becomes essential the ability to recruit valuable employees (Karasek, 2016), first of all competent and determined, but also capable of positive change, being capable of accepting innovation processes as a determinant of performance.

Promoting a flexible and open organizational culture, as well as an innovation culture, are the key to validating long-term strategies.

Innovative approaches in literature show us a direct link between individual enterprise performance and how organizations succeed in assimilating the "new", ie their ability to integrate innovation in the overall, and long-term strategy.

However, performance is also conditioned by how innovation is achieved, as each enterprise stands out uniquely, while "a new competition poses a challenge to the innovating firm" (Lazonick, 2012).

Popescu (Popescu, 2016) defines the innovative organization as a "company that continuously innovates, in order to create and reinvigorate new markets, products, services and business models - which leads to growth."

Some of the features of innovative organizations can be synthesized as follows:

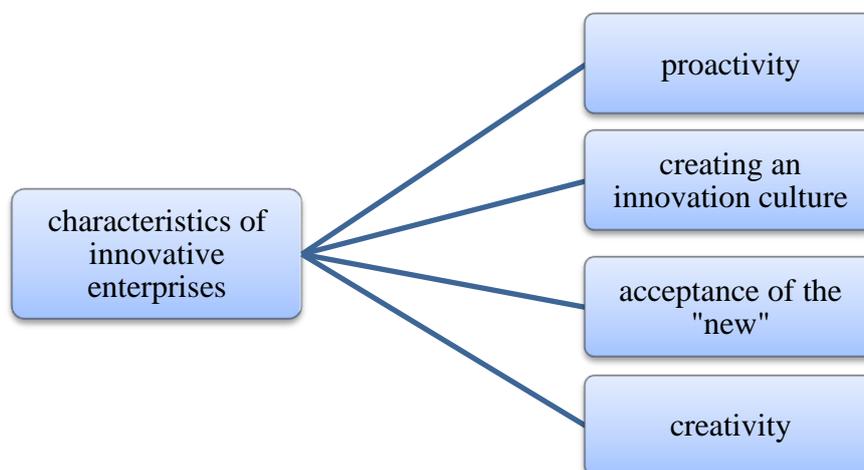


Figure no. 2 – Characteristics of innovative enterprises
(Source: adaptation after Davila (2006), in Popescu (2016))

According to Costa (Costa et al, 2016), OECD (2010) considered growth "as being correlated with innovation-based activities (even though no robust conclusions were found on the direction of causality) and not directly with innovative or specific sectors".

De Mel (De Mel et al, 2009) mentioned four types of innovation: product innovation, process innovation, marketing innovation and organizational innovation. However, official statistics illustrate data only for the first two categories.

According to the Innovation Index (EY, 2015), we can identify four performance groups in the EU: the modest innovators, the moderate innovators, the innovation followers and the innovation leaders. When speaking about the European Union strategy on innovation we must consider that it is part of the Europe 2020 strategy for growth and jobs, the main purpose of creation being the establishment of an innovation-friendly environment.

2. THE ANALYSIS OF STATISTICAL DATA REGARDING THE ENTERPRISES WITH PRODUCT OR PROCESS INNOVATION

The data presented by the National Institute of Statistics in Romania's Statistical Yearbook for 2016 provide us with information on innovative enterprises from several perspectives: on the one hand, through the type of innovation, and on the other hand in terms of the evolution of the number of employees in the aforementioned enterprises and of the turnover registered by them.

We believe that all three perspectives are essential for illustrating a correct image of the Romanian companies' innovation capacity. For all three of the above, we take the 2015 benchmark, for which we see the following developments:

Table no. 1

Enterprises with product and/or process innovation, by type of innovation

	Total	Product innovation	Process innovation	On-going or abandoned innovations
Total	1840	313	511	311
Small	1258	219	353	235
Medium	371	55	114	59
Large	211	39	44	17
Industry	937	148	200	95
Services	903	165	311	216

(Source: Romania's Statistical Yearbook for 2016)

We therefor note that of the 1840 innovative enterprises in the year 2015, the largest share is held by enterprises with process innovation - 511, followed by those with product innovation - 313. Not all enterprises that engage in innovation activity, however, finalize this, with the result that a number of 311 enterprises, either abandoned the processes started or haven't completed them by the date of data centralization by the competent bodies in the field.

Of the total innovative enterprises, the majority are small enterprises - 1258, followed by a smaller number of innovative enterprises with more than 50 employees, the field of activity being largely a factor of influence, because the number of innovative enterprises in the industrial field is very close to the number of service providers, as can be seen in the table above.

Table no. 2

Enterprises with product and/or process innovation, by the number of employees

	Total number of employees	Total number of employees of innovative enterprises	%	% of total
Total	2031203	470656		23,2%
Small	450162	55655	11,85%	12,4%
Medium	538847	87185	18,52%	16,2%
Large	1042194	327816	69,63%	31,5%
Industry	1279605	331412		25,9%
Services	751598	139244		18,5%

(Source: Romania's Statistical Yearbook for 2016)

From the analysis of the total number of employees in the innovative enterprises we can see, as it is obvious, that the employees in the large innovative enterprises have the largest share in total - 69.63%. Employees in small innovative enterprises account for 11.85% of the total, while employees in medium-sized enterprises account for 18.52%.

Compared to the total number of employees in Romania in 2015, the Statistical Yearbook shows us that only 23.2% of them work in innovative enterprises, the breakdown by category, according to the size of the enterprise, indicating in this sector a weight of 12.4% of the total number of employees in small enterprises, 16.2% of all medium-sized enterprises, and 31.5% of all large enterprises. According to recent studies, "SMEs contribute significantly to economic, growth but are generally less productive" (Eric et al).

Also, 25.9% of employees in industrial enterprises are active in organizations that promote innovation, which is also the case for 18.5% of service employees.

The data on the turnover registered in 2015 by the innovative enterprises shows us the following graphic representation, broken down by the size of the enterprise, namely the field of activity and the share held in total:

Table no. 3

Enterprises with product and/or process innovation, by turnover

	Total turnover of all enterprises	Total turnover of innovative enterprises	% of total
Total	800965586	250620882	31,3
Small	147439300	19799237	13,4
Medium	174219298	37884374	21,7
Large	479306988	192937271	40,3
Industry	383713244	157006433	40,9
Services	417252342	93614449	22,4

(Source: Romania's Statistical Yearbook for 2016)

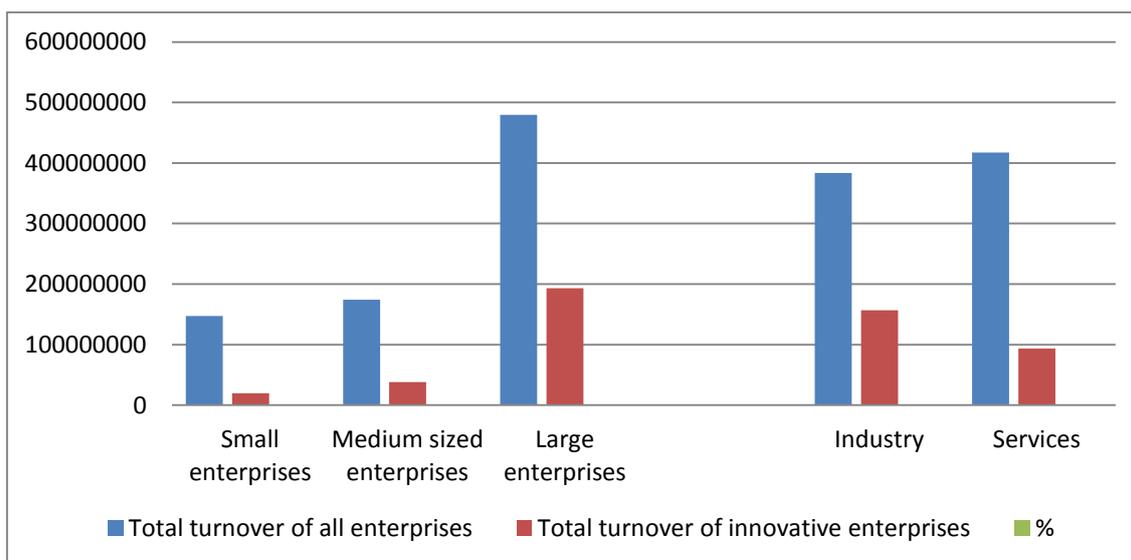


Figure no. 3

(source: processed by authors, using information from Romania's Statistical Yearbook for 2016)

The turnover of the small innovative enterprises represent 13.4% of the total number of enterprises of this type, the share of turnover in medium-sized enterprises is 21.7%, while the share of turnover in large enterprises represents 40.3% of the total, a relatively high share in the latter case, given that a relatively small percentage of large enterprises implement innovative activities - 31.5%.

An innovation strategy implies, in addition to the presence and development of creativity, an involvement of the staff, who in turn must understand the need to implement the strategy in question and provide full support and share the enthusiasm of change.

The field of business can be considered a criterion for differentiating firms' innovation capacity. Thus, if innovation is considered less possible in the field of tourism, it prevails in the industrial field, where we find the highest percentage of companies concerned with this, the technical or technological field being considered the most prone to new discoveries and changes more than other fields of activity.

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