

FACTORS INFLUENCING INNOVATION IN SMES IN ROMANIA

Holban (Oncioiu) Ionica

*Alexandru Ioan Cuza University of Iasi and
Academy of Economics Studies from Bucharest*

Oncioiu Florin Răzvan

University of Agronomic Sciences and Veterinary Medicine of Bucharest Romania

Innovation is a broad concept and it is not in contradiction with tradition. Any entrepreneur, even when working in a traditional sector or businesses with strong traditions such as a family business can be innovative.

Innovation is not only pushed by the entrepreneur but is increasingly market pulled. Through an innovation entrepreneur it is wanted to influence his market structure or to develop new markets. Radical innovations introduce new business concepts, which require an ability to organize resources and competence in novel patterns. Enterprises extend their ability to develop new business concepts, their dynamic capability, by accessing external resources. This study proposes to investigate how the use of external resources varies in the course of SMEs innovation processes, and how deployment of external resources is influenced by the nature of the innovation as well as by the context of the innovation process.

Keywords: Small and Medium Enterprises, competitiveness, innovation.

JEL: O32, Q55

Introduction

In an increasingly complex business environment, organizations have been confronted with rapid changes in technology, competition, regulation and customer needs and demands. This has caused managers and researchers alike to search for new ways of developing organizational capabilities by continuous adaptation and anticipation of the need for change. Organizational learning, which promotes continuous adaptation and change, has therefore captured the imagination of managers seeking to survive the current turbulent operating environments.

Innovations may represent novelties in one or along several dimensions. They may provide new products or services to a market; they may introduce new technology to existing products; they may introduce new forms of organization of a SMEs or a value creation chain.

The focus here is on innovation processes that are more than minor improvements of existing products or processes. Our interest is the introduction of products or processes that add novelties to the degree that they represent new business concepts, and will require and provisions outside daily operations.

A new business concept is the spark that triggers the innovation process. It is on how the novel products or processes may be achieved from the platform of current operations, that is, products and processes, combined with thoughts or estimates of the market new business concept. The new business concept is conceived from the current state of products and processes in the enterprise, the current markets and a perception of future market opportunities.

With the current rapid transformation of markets, enterprises would quickly stagnate and competitive positions without renewing. Such renewal is most often produced by several small adjustments, commonly referred to as incremental, stepwise or gradual innovations. In many cases, incremental innovations are implemented in the course of ordinary operational activities hardly noticed from day to day. However, the cumulative effect of incremental innovations is usually sufficient to maintain a competitive position when changes in markets follow predictable patterns.

Consistency between two major elements is decisive for a successful completion of the SMEs innovation process. The first element is the character of the innovation - what challenges does the innovation present. The second element is the capability of the SMEs to address these inherent challenges, that is, the capacity of the enterprise to muster resources and to act in a sufficiently dynamic way.

Literature review

Innovation is not confined to the area of entrepreneurship. Also other agents such as government agencies or non profit institutions can ‘innovate’ but in this paper we limit the discussion to innovation and entrepreneurship, operating in a market environment.

By definition, innovation processes address novel products or processes that require new capabilities or a new application of existing capabilities. Moreover, when the innovation requires interaction between an increasing number of components or subsystems, the complexity of the innovation process will increase rapidly.

The link between entrepreneurship and innovation has been established strongly since Joseph Schumpeter. Since then innovation is considered as an essential characteristic of entrepreneurship. The link is emphasized by any textbook on entrepreneurship, even introductory ones, such as for example Zimmerer and Scarborough in its fifth edition (2008): “Entrepreneurs also create innovations to solve problems they observe, often problems they face themselves”.

The fundamental issue is the management of innovation processes, which differs from management in general (Salomo & Hözle, 2007) due to the high level of uncertainty and application of novel competence.

However, in discussions on innovation there is a tendency to associate it with large, technologically advanced firms. This was already a sensitive point for Schumpeter, as can be read in the contribution of C. Freeman in the Palgrave dictionary: “Schumpeter (1928 and 1942) is often known for his emphasis of the advantages of large size and monopoly on innovative performance, whilst traditional theory has continued to stress the advantages of competitive market structures”.

Business innovation processes require access to new resources, including competence (Bayer & Gann, 2007; Chell & Baines, 2000), which are frequently tapped from external sources. Many therefore consider better access to such external resources to be a vital policy instrument to support the innovative capacity of the business sector, especially for smaller enterprises. The term innovation system (Cooke, 2001) has often been used to describe the interaction between an individual firm, on the one hand, and firms and institutions that can provide such resources on the other hand. Innovation systems have received attention from researchers as well as policy-makers as possible instruments for improving the innovation capacity of enterprises. It is imperative that innovation systems are developed with a thorough understanding of how enterprises utilize external resources in their innovation processes.

During times of dramatic changes in the business environment or when SMEs exploited completely new opportunities, incremental innovations would not provide sufficient le for rapid and large transformations. We refer to these large transitions over a short time period as radical innovations. They are also referred to with terms such as discontinuous or really-new innovate (Garcia & Calantone, 2002; McDermott & O’Connor, 2002).

The innovation capacity of an enterprise thus rests on the foundation of its resources, which have been accumulated as a result of previous activities. These resources have been shaped by the needs of the past and are subsequently applied in the current innovation process to respond to the needs of the future. The ability to come up with novel solutions will therefore depend on an ability to adapt the resources in response to the new requirements of the innovation process (Eisenhardt & Martin, 2000; Pek-Hooi, Mahmood, & Mitchell, 2004; Teece, Pisano, & Shuen, 1997).

Eisenhardt and Martin (2000, 1107) define dynamic capability as “....the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die.” The dynamic capability is thus the process at the strategic level that enables the enterprise to change the content, structure and organization of the resources that are available to the innovation process. Correspondence between the dynamic capability and the dynamic change patterns of the business environment is essential for the long-term survival of the firm. Therefore, adequate flexibility in its dynamic capability constitutes a significant part of the core competence for a firm’s innovative sustainability.

However innovation is not only a matter of product differentiation or product management in general. It refers to all aspects of doing business. Entrepreneurs can be innovative with regard to any aspect of running their business including the production processes, the organization structure, finance management etc. Innovation can be successfully applied in ‘new’ sectors such as high-tech but as well in very ‘traditional’ sectors in industry, services and even agriculture. It can be successfully applied in new startups with an informal business culture but also in existing businesses such as family businesses with a tradition of several generations. Small as well as large businesses can be innovative with regard to their product, their technology, their organization or their financial management.

Government intervention within the European economic area

Businesses operate in a market within an open space such as the European Economic Area. When a national or regional government wants to design a policy to support entrepreneurship in general of innovation in particular, it has to focus on the businesses which are active on its territory.

This is a very important case for EU policy. On the one hand there is an argument in support of positive government intervention; on the other hand the European Commission has to watch carefully the rules of fair competition within the European Economic Area. The following quotations from European policy documents show that it is not easy for the European Commission to find equilibrium between these considerations.

“The identification of policy areas should be market-driven, in full respect of the need to preserve free and fair competition. Without excluding any areas from such initiative, there is a clear public interest in helping the emergence of solutions that would provide answers to citizens’ concerns. These would, in particular, be areas where public authorities play a critical role to eliminate existing barriers to market take-up of new products. However, this should not be at the expense of supporting innovation in more traditional sectors” (2006, p. 12)

Innovation is market driven and not only pushed by the firms. This has been recognized by the EU: its policy should be devoted to support ‘innovation management’ and to develop the promotion of markets. “Innovation management” is a prerequisite for innovation to flourish in firms. Many enterprises, especially SMEs, encounter difficulties in planning, implementing and marketing innovative products and in innovating in their production processes. Innovation cannot work without taking people into account”. “Enterprises of all sizes should be more flexible in responding to rapid changes in demand, adapt to new technologies, such as ICT and e-business, and be able to innovate constantly in order to remain competitive”. (2005, p. 17)

The main motivation of the European Commission to accept state aid within the European Economic Area is the possibility of market failures. “Aid for projects covering fundamental and industrial research and experimental development is mainly targeted at the market failure related to positive externalities (knowledge spillovers), including public goods”. Other forms of aid are motivated in a similar way (2006, p.8)

Innovation and competitiveness in the Romanian SMEs

Innovation is a crucial concept involving creativity, organization and profitability but can it be measured? Is it possible to use operational concepts that allow measurement?

The creation of new businesses is necessary for the renewal and modernization of the economy but not sufficient. The new businesses also must be of ‘good quality’. But what does that mean? One of the characteristics of this ‘good quality’ is the degree of innovation. Now the question arises: is it possible to measure the innovation?

From the first 10 states using the GDP for each inhabitant, only one has a social contribution in the net profit resembling ours, Suede, with 38%. Next we find Finland with 29,6%. But the first 5 states as a developed well being of the population has reduced ponders: Norway (16,3%), Island (13,7%), Switzerland (11,5%), USA (10,1%) and Denmark (2,2%). The data confirms a much tied connection between the work tax and the suburb economy, comparing that between the income tax and gray economy. The Northern states with large amount of social expenses in the brut profit have also increased suburb economies. Suede, Norway and Finland, have gray economies of 19%, while USA or Switzerland – only 8,8% of the total economy. In spite of reducing the income tax and those on the profit to 16%, Romania with assistance expenses of 38,6% has a suburb economy of 34,4%. It is very logical why a company manager to be very reticent to legalize his affair, as long as due to the “fiscal reform” it has a reduction for taxes, incomes and contributions by 2,2% of the brut profit, and not 9% as the governors say.

In Romania was created a vicious circle where the state is ensuring the minimum financial resources for stimulation of knowledge-based economy and only a few companies proved able to compete through innovation. Very often knowledge is strongly connected with people and all or part of it can do a major challenge. Innovation system is important for clarifying the area of innovation policy and also for fostering the interactions.

According to the statistics of Ministry of Education and Research until 2002, a number of 590 units were involved in the innovation system. Out of which 280 were research and development institutes and 310 joint-stock companies (public or private) with research -development as the main object of activity. Since 2003 the situation of research system was improve because, on the hand, Romania became a member of the European Patent Convention in March and, on the other hand, the Government took the Decision 406/2003 where there are present specific conditions regarding the eligibility of a firm or a department of research institution to be considered as an innovation entity. In the document is specifically that the applicants for such a status provide certain documentation in order to be accepted. So, being with that decision an innovation entity can be called innovation infrastructure unit, practical a new concept was introduced refers to technological transfer centers which are financed through a governmental program. That initiative is very important for creating the visibility of the entity which wants to invest in innovation. The current situation of Romania is highly dependent upon the visibility level and the research system that includes the research institutes, the research departments of universities, and research departments of the companies.

The specific situation in Romania regarding the research system was considered to be the only policy element, so, research and innovation are not approached as different process that address distinct markets and have a different timelines. This does not mean that the research units are able to move on the global technological frontier and increase their chances to apply innovation.

The initiative to the governmental level of innovative process based on the market strategies have the most important role in transforming the visible knowledge into marketable products and representing the economic opportunity of recombining knowledge. At top of that, more and more companies have involving in different stage of the innovation process. In order to stimulate the companies to start their learning process, the first necessary step is to ensure a higher visibility of the economic benefits that knowledge incorporation brings about.

In this direction in Romania the capital and financial channels for innovation activities can be the private venture capital. The availability of that capital does not depend only on financial issues, but also on other factors as follows:

- the risk propensity;

- the provider's capacity for technical evaluation;
- the provider's insertion on the innovation market.

The innovation infrastructure includes: incubators (infrastructure for start-ups), technological parks (experimental facilities), technical transfer centers and the system of intellectual property. Regarding the infrastructure the government consistent policy measures according to the recently launched National Plan for Developing the Infrastructure for Innovation and Technological Transfer. In this plan is mentioning the amount which is destined to co-finance centers of technological transfer, office for connection with industry, technological parks and technological incubators.

Ministry of Education and Research and the Ministry of Communications and Information Technology aim to attract to industrial parks with intention to create such parks in every Romanian city that has a university center. They estimate that around 50 business incubators have been created, but there are no monitoring mechanisms and no efficiency criteria or targets for them.

The whole set of documents released by the Romanian authorities regarding the evolution of research, development and innovation systems does not even address the issue of patents and it was only in 2004 that the grants are made conditional on patent applications.

Results and discussion

At the moment, companies hiring less than 10 employees produce more than 20% of Europe's value added and offers employment for approximately 50 million European Union' citizens. SME represent 98% of approximately all enterprises in Europe. Approximately 80% of their activities are carried out at a local or regional level.

Therefore, for Romania the small and medium businesses are representing the engine of the economic growth and a vector for disseminating the research and development results. The increase of the small and medium businesses sector had a positive influence upon the businesses environment reducing the unemployment rate and increasing the productivity. It is necessary for the Romanian state to rethink the fiscal system in order to better sustain the growth of the small and medium businesses sector taking into consideration that even though its major role in the development of the country is known and admitted the support is not likewise. We think of this considering that even though the number of the small and medium businesses in Romania has grown, the number of small and medium businesses to 1000 inhabitants is under the number from the European Union (in Romania the number of small and medium businesses to 1000 inhabitants is 25 and in the European Union is 64).

Strategies related to the environment characteristics, when an accentuate competition on the internal market and a rapid change rhythm in their activity domain can be associated with the orientation to the international market- between them it should be mentioned the niche's strategy, which presupposes their concentration on the products and services for which it is disposed competitive advantages as a result of their capacity of innovation, adaptability and personalization of the production in connection with the request exigencies.

Conclusion

Innovation is a broad concept. Innovation is not in contradiction with tradition. Any type of entrepreneur, even when working in traditional sectors or in businesses with strong traditions such as family businesses can be innovative with the product, the production process or any aspect of doing business.

Innovation is increasingly market pulled: entrepreneurs meet and want to solve a problem but at the same time the entrepreneur wants to influence his market structure or to develop new markets through his innovation. Policy has to protect intellectual property and to promote competition.

There is a high correlation but not full coincidence between entrepreneurship and innovation.

The degree of innovation is monitored by policy makers. A high degree of innovation is considered to make the economy more ‘competitive’. Innovation will not only support the development of new products or increase the productivity of labor and capital, but also bring more economic growth, employment, a better balance of payments, improve the labor conditions etc. There is clearly a link between microeconomic issues such as entrepreneurial startups and macroeconomic performance.

It is not easy to measure innovation. Businesses operate in international markets while policy makers focus on a territory. Very often the effect of a policy is felt beyond the territory of the government. In a large area such as the European Economic area there is much interdependence and many spillovers. This is especially the case in a small open economy operating in this type of market as is illustrated by the case of Romanian.

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