ALLUSION TO PUBLIC POLICY: INNOVATIVE ENTREPRENEURSHIP

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Abstract. Innovations play a significant role in surviving in economic and market games. However, the innovation is not self-sufficient tool for response of all future challenges and needs. It requires potential for new knowledge generation, adaptation and commercialization, and support of government. Therefore, the article presents a conceptual analysis of the relationship between innovation and entrepreneurship, with the main focus being on the business sector, highlighting the role of government policy in the promotion of innovation through entrepreneurship.

It is said that the dimension of innovation is at the core of entrepreneurship, but at the same time these concepts still often are defined singly. The concept of entrepreneurship is often wrongly explained, just as business activity or establishment of new enterprises without focus on innovation. In this respect, there is a suggestion to adopt the concept of innovative entrepreneurship as the new direction for development of innovation through entrepreneurship.

Keywords: innovation, entrepreneurship, enterprise, innovative entrepreneurship, public policy, government.

Raktažodžiai: inovacija, antreprenerystė, įmonė, inovatyvi antreprenerystė, viešoji politika, valdžia.

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1. Introduction

The innovation process of the 21st century is radically different to that of the preceding one. The change can be resumed as a shift from the “Managed Economy” to the “Entrepreneurial Economy.” In the former, science and systematic large firm research and development (R&D) was the key. Currently, entrepreneurship is one of the foundations of innovation (OECD 2010).

Every innovation, whether it is purely technological, or if it consists in a modification in the way in which an industry is organized, requires entrepreneurial initiative in its introduction (Baumol 1968, 64).

Entrepreneurship covers an individual’s motivation and capacity, independently or within an organization, to identify an opportunity and to pursue it, in order to produce new value or economic success. It takes creativity or innovation to enter and compete in an existing market, to change or even to create a new market (Commission of the European Communities 2003).

However, entrepreneurship and innovation require a favourable environment, which will stimulate the actions of individuals and organizations in these areas. That highlights the importance of the incentives of the government.

Therefore the main idea of this article is directed towards the disclosure of the significance of the relationship between innovation and entrepreneurship, and towards the role of government policy in the mentioned field.

Although the theme of stimulation of an innovation is increasingly discussed, research of the role of entrepreneurship in innovation activities is still fragmented. Furthermore, there is the large number existing definitions of innovation and entrepreneurship, but the concept of integrating both innovation and entrepreneurship hasn’t been adopted yet. In addition, there is a lack of research exploring the role of public policy to the promotion of innovation through entrepreneurship.

Thus the problem of this article is the question about the relationship between entrepreneurship and innovation and the role of public policy therein.

Accordingly the goal is to examine the role played by entrepreneurship in innovation activity and then to offer assumptions for the development of initiatives in field of government.

Thus the object is the relationship between innovation and entrepreneurship.

Research method is the systemic and comparable analysis of scientific literature.

The emphasis in this article is on two parts of the spectrum, namely the relationship between innovation and entrepreneurship, and the role of government policy in the mentioned field. The main focus in both cases is on the nexus between innovation and entrepreneurship activity at the small and medium-sized enterprise (SMEs) level.

This paper includes the following: an analysis of different definitions of innovation and entrepreneurship, and their relationship; the suggestion to adopt the concept of innovative entrepreneurship; the classification of entrepreneurship research areas; the integrative conceptual framework of the interaction between entrepreneurship
and innovation; the substantiation of the government’s role in the promotion of innovation through entrepreneurship.

The new suggested approach to innovation promotion may be a new area of future research and the first step is the incentive to transform the traditional business into innovative enterprise sector in front with increased competitive abilities and fast adaptation to changeable environment.

2. Relationship Between Innovations and Entrepreneurship: Literature Review

2.1. Conceptual Innovation Framework

The concept of innovation has various meaning in the different contexts. Depending on the field of activity innovation, conception often is defined as the development of new goods, new methods of production, new markets, and new forms of organization.

Schumpeter explains innovation as behavior and activities, based on destruction of contemporary frames of thoughts and action, which leads to the creation of new goods or quality of goods; development of new methods of production; establishment of new markets; utilization of new supply sources or; industrial reorganization, and hence breaks with the existing (Schumpeter 1934 and 1939).

In the Green Paper (European Commission 1995), innovation is characterized as the successful production, assimilation, and exploitation of novelty in the economic and social spheres. Innovation offers new solutions to problems and thus makes it possible to meet the needs of both the individual and society.

C. Livingstone interpreted innovation as the process whereby new ideas are transformed, through economic activity, into a sustainable and value-creating outcome. There are two key words in this interpretation which are worthy of emphasis: “process.” Innovation is not just the idea—innovation is only achieved when the idea has been transferred into an outcome which has value. The second key word is “sustainable.” Sustainability requires good integration with those who assign value i.e. the customers, the market, and it implies rigour and continuous measurement (Hindle and Yencken 2004).

Herbig et al. noticed that innovation requires three basic components: the infrastructure (facilities), the capital, and the entrepreneurial capacity needed to make the first two work (Herbig and Golden and Dunphy 1994).

In view of reliance of innovation definition on different context, it is necessary to note the concept of the social innovation. Nowadays it has the increased attention in the area of politics as the way for solutions to social problems and needs. According to the OECD, social innovation seeks new answers to social problems by identifying and delivering new services that improve the quality of life of individuals and communities and identifying and implementing new labour market integration processes, new competencies, new jobs, and new forms of participation, as diverse ele-
ments that each contribute to improving the position of individuals in the workforce (OECD 2010).

Research, development, and the use of new technologies often are named as the key elements in innovation. But human resources are the essential factor here. Innovation comes from people being able to combine their different ideas, skills and assets to create new recipes for how we make products and provide services, in both the private and the public sector (European Commission 2009). According to the importance of human resources in the successful innovation activity some scientists relate the innovation concept with entrepreneurship. It is the crucial point of the transforming the traditional business to the innovative business activity.

P.F. Drucker in his book *Innovation and Entrepreneurship* claimed that *innovation* is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service (Drucker 1985).

Consequently, this shows the strong link between the concepts of innovation and entrepreneurship and the necessity to analyze these terms jointly.

### 2.2. Entrepreneurship Theory: Definition and Classification

Entrepreneurship is multi-dimensional and can be considered in different contexts, but its importance for economic development and social wellbeing is unquestionable. The focal reasons for further researches in this area can be named as: economic growth through creating new business based on innovation activity and focusing on new opportunities; increased competitiveness at firms and countries levels, also at national and international level; employment growth, productivity and unlocked personal potential. Accordingly, here we may denote the three main fields of entrepreneurial activity: individual, enterprise and society.

Entrepreneurship as a research area is quite recent. Therefore much confusion existed over truthful definitions of “entrepreneur” and “entrepreneurship.” Nowadays there also isn’t the unanimous understanding of meaning and significance in these words. Still, often these concepts are wrongly identified as denoting a businessman and a business.

The French economist Richard Cantillon is generally accredited with being the first to coin the term “entrepreneurship” in about 1730. He defined entrepreneurship as self-employment of any sort, and entrepreneurs as risk-takers, in the sense that they purchased goods at certain prices in the present to sell at uncertain prices in the future (OECD 2006).

The European Commission defined entrepreneurship as a dynamic process by which individuals constantly identify economic opportunities and act upon them by developing, producing and selling goods and services (European Commission 1998).

According to Shane entrepreneurship is an activity that involves discovery, evaluation and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes, and raw materials through organizing efforts that previously had not existed (Shane 2003).
Hoffmann designated five such determinants of entrepreneurial activity, which are as follows: resources (access to technology and finance); skills (capabilities and access to skilled labour); cultural factors; opportunities (market conditions); regulatory framework (Hoffmann 2007).

Sometimes, an entrepreneur is defined as the organizer of any new firm, whether or not the enterprise is novel in the operation or organization. But for other writers, following Joseph Schumpeter, the entrepreneur is actually an innovator, who is always engaged in doing something that was never done before, and not just founding yet another business entity of a sort that already exists.

Baumol stated that an entrepreneur’s goal is the acquisition and accumulation of wealth, power and prestige, with innovation used as a primary weapon in pursuit of those objectives (Baumol 2004: 9-16).

Literature has documented the link between the entrepreneur, innovation, and multiple sources of wealth creation. However not all entrepreneurs are equal in economic potential. Entrepreneurs who do not innovate do not create wealth (Michael and Pearce 2009: 290-291).

Baumol took note of the existence of productive, unproductive and destructive entrepreneurship. That depends on the creation of the wellbeing of society. Not all entrepreneurs care about it (Baumol 1998). For Baumol, a productive entrepreneurial activity refers to any activity that contributes directly or indirectly to net output of the economy. An unproductive entrepreneur engages in innovative activity but makes no contribution to the real output of the economy. A destructive entrepreneur engages in innovative activity that leads to the misallocation of valuable resources into pursuits that from the viewpoint of the economy are useless and are carried out for the self-serving purposes of the entrepreneur (Baumol 1993).

Dalohoun et al (Dalohoun and Hall and Van Mele 2009, 90) said that entrepreneurial endeavor awakens other actors, offering them opportunities and propelling them into the innovation process. The combined insight is that entrepreneurship can spur innovations, steer the innovation processes and compel the creation of an innovation-enabling environment.

O. Stripeikis denoted four such main directions in entrepreneurial behaviour in organization: the building of an entrepreneurial team; creation of entrepreneurial culture in organization (i.e. creativity, teamwork, risk tolerance, capability to solve problems); adaptation of corporate strategy to the challenges encountered in a business environment; observation of opportunities in an external business environment (Stripeikis 2008: 171).

Ž. Židonis remarked on the difference between the activities of an entrepreneur and a manager. In this regard, the activity of entrepreneur related to revolution and transience whereas the work style of manager is evolutionary and long-term (Židonis 2008, 10).

At the society level there is the concept of social entrepreneurship. The term “social entrepreneurship” is used to refer to the rapidly growing number of organizations that have created models for efficiently catering to the basic human needs that existing markets and institutions have failed to satisfy (Seelos and Mair 2005). The
key characteristic of social entrepreneurship is that it aims to provide innovative solutions to unsolved social problems through some form of business. It often goes hand in hand with social innovation (OECD 2010).

Seeing that innovation certainly exists in the public sector services, it is necessary to say that the environment within which public sector entrepreneurs operate is very different to that of private sector markets. Social responsibility and accountability, plus the very different networks found in the public sector, give rise to a very different set of barriers and enablers for the diffusion of innovations (Windrum and Koch 2008).

The research supports Morris and Jones’s model of the entrepreneurial process in the public sector. This contains five steps: (1) Opportunity identification; (2) Concept development; (3) Assessment of required resources; (4) Acquisition of resources; (5) Managing and harvesting the venture (Morris and Jones 1999: 75).

This model is a translation to the public sector of Stevenson’s model (Stevenson and Gumpert 1985) of private sector entrepreneurship. There are the six critical dimensions of business practice: strategic orientation, the commitment to opportunity, the resource commitment process, the concept of control over resources, the concept of management, and compensation policy.

The commercial entrepreneurship model suggested by Sahlman (Sahlman 1996) stresses the creation of a dynamic fit among four interrelated components (PCDO):

- *the people* (people’s skills, attitudes, knowledge, contacts, goals, and values provide the resource mix that contributes centrally to success),
- *the context* (elements outside the control of the entrepreneur that will influence success or failure: economic environment, tax policies, employment levels, technological advances, regulatory structure and sociopolitical environment),
- *the deal* (economic benefits, social recognition, autonomy and decision rights, satisfaction of deep personal needs, social interactions), and
- *the opportunity* (defined as “any activity requiring the investment of scarce resources in hopes of a future return”).

Agreeably to the wide variety of explanations of entrepreneurship concept there is possible to suggest the classification of entrepreneurship research areas (Figure 1). From the level point of, in which entrepreneurship occurs, there is a separation of individual, business and public sectors. The different entrepreneurship types in classification include technology entrepreneurship, social entrepreneurship, strategic entrepreneurship, corporate entrepreneurship and entrepreneurship education. Economic growth, productivity, employment and social well-being are named there as the impact of entrepreneurial activity.

Despite the existence of various different approaches used to describe entrepreneurship, there is possible to say, that at the core of entrepreneurship is dimension of innovation. On that account hereafter in this article a systemic approach to the relationship between innovation and entrepreneurship is suggested.
2.3. Link between Entrepreneurship and Innovation

Innovation is the specific tool of entrepreneurship, by which entrepreneurs exploit change as an opportunity for a different business or service. There is considerable overlap between entrepreneurship and innovation (Schumpeter 1934, Drucker 1994, Sundbo 1998, Zhao 2005).

P. Drucker said that the term entrepreneurship refers not to an enterprise’s size or age but to a certain kind of activity. At the heart of that activity is innovation: the effort to create purposeful, focused change in an enterprise’s economic or social potential (Drucker 2002: 95).

Kevin Hindle and John Yencken also agreed with P. Drucker, that entrepreneurship is like the engine of innovation. They indicated the accumulated tacit knowledge and culture of the entrepreneur as the resources essential to create wealth from research commercialization leading to technological innovation and the creation of new technology based firms (Hindle and Yencken 2004).

The link between innovation and entrepreneurship dates back to Schumpeter. In Schumpeter’s classic description, the entrepreneur is the driving force that initiates the development of a novel innovation and successfully manages the diffusion of the innovation (Windrum and Koch 2008). He listed five different kinds of innovations or ways to act as an entrepreneur: (1) the introduction of a new (or improved) good; (2) the introduction of a new method of production; (3) the opening of a new market; (4) the exploitation of a new source of supply; (5) the re-engineering/organization of business management processes (Schumpeter 1934).

Schumpeter’s definition therefore equates entrepreneurship with innovation in the business sense; that is, identifying market opportunities and using innovative ap-
proaches to exploit them (OECD 2006). It is said that while entrepreneurship has to do with the entrepreneur's ability to see opportunities and transform them into an interesting proposition, innovation refers to the act of materializing that opportunity in a change of some sort, e.g. a product, a service, an organizational change or a new process (Harkema and Henk 2008: 513).

According to the theoretical foundation stated above there is the unquestionable link between entrepreneurial activity and innovation. In addition, the relationship between entrepreneurship and innovation concepts, and their interaction notes the requirement to suggest the concept integrates both innovation and entrepreneurship as a condition for development of innovation activity.

2.4. Step to the Future: Innovative Entrepreneurship

Intensified global competition and rapidly changing market conditions increase uncertainty of a wide range of traditional business parameters, and innovation is thus becoming a determining factor for existing firms to gain competitive advantages (Bessant and Lamming and Noke and Phillips 2005).

Many empirical studies have shown the aggregate relationships between entrepreneurship and SME activity and economic growth and job creation. These growth and job creation effects happen through innovation, as new firm creation and SME growth increase productivity and bring new or under-utilized resources into use (OECD 2010). Therefore, new firm creation through entrepreneurship and innovations in existing SMEs plays an important role.

However, in spite of an intensive focus on the importance of innovation and changeability, a majority of firms experience great difficulties in understanding and managing the kind of entrepreneurial innovation which breaks with familiar knowledge or ways of operating and therefore requires more than the ability to incrementally improve existing products, processes or services (Christensen 1997). These difficulties of path-dependency might suggest that firms are still depending on traditional structures and management principles, though trying to enter into new and dynamic competitive arenas (Heidemann and Løwe 2009: 182).

Audretsch stated that the entrepreneur is the missing link between knowledge and innovation. It is the mechanism by which the knowledge becomes commercialized and hopefully, in some cases, results in success (VINNOVA and the George Washington University 2006). Therefore he compared the SME model with the entrepreneurial model of doing business (Table 2).
Table 2. **Comparison of the entrepreneurial business model and the traditional SME model**

<table>
<thead>
<tr>
<th>SME Model</th>
<th>Entrepreneurship Model</th>
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<tbody>
<tr>
<td>Tradition Sectors</td>
<td>New Emerging Sectors</td>
</tr>
<tr>
<td>Family Tradition</td>
<td>High R&amp;D</td>
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<tr>
<td>Low R&amp;D</td>
<td>High Human Capital</td>
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<td>Low Human Capital</td>
<td>High Wages</td>
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<td>Low Wages</td>
<td>Turbulence</td>
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<tr>
<td>Stability</td>
<td>New Sources of Finance</td>
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<tr>
<td>Traditional Sources of Finance</td>
<td>High Growth</td>
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*Source: Adapted by David Audretsch (VINNOVA and the George Washington University 2006)*

According to the review of the innovation and entrepreneurship theory there is a clear causal importance to the development of the concept, which will integrate all three elements: innovation, entrepreneurship and business. On one hand, the business sector keeps the essential role in the development of innovation activity. But, on other hand, it must have the entrepreneurial potential for the creation, development and commercial adaptability of innovation. In above-mentioned instance the concept of *innovative entrepreneurship* might be the important direction for further research in innovation area. This concept suggests the approach to the entrepreneurial activity of enterprises going face-to-face with innovation activity. The theoretical framework of the concept of innovative entrepreneurship is suggested in Figure 2. The suggested notion is not sequestered and occurs in a complex environment, including the inside and the outside.

In view of definitions of entrepreneurship and innovation there are the main three parts that go into internal environment of enterprise. One is the organizational culture, which stimulates creativity and has the persistent orientation to changes and innovation activity. Second are the human resources, who can be named as the substantial factor determining a life-cycle and success of enterprise depending on their knowledge and skills. Another one is related to management style which strives to raise the business and to ensure its prosperity through innovation activity, including searching for new opportunities, flexible personnel management and the building of a favourable environment for creativity in-house. Public policy, technology and other environment conditions (such as: regulation and tax system, investment to higher education, level of lifelong learning and others) play an essential role in external environment.

The meaning of public policy is defined broadly in this case. It involves the facets of R&D, innovation, education and enterprise policies. Here is the focus of attention to the horizontal innovative entrepreneurship policy.
3. Innovative Entrepreneurship as the Key Direction for Public Policy

The major part of the scientific sources designates innovation and entrepreneurship as the keys for sustainable economic growth and wellbeing of society. For instance, R. Sinha noted, that innovative entrepreneurship impacts the economy at three levels:

- **At the aggregate level.** Innovative entrepreneurship benefits the overall economy by creating new jobs and increasing income, raising the potential for new investments.

- **At the consumer level** the effect of innovation is the added value for consumers—the improved products or services available to them at lower costs.

- **At the firm level.** Herein innovators can out-compete other companies that are not innovators, because of the cost advantages that innovation produces. Fur-
thermore, firms that produce innovative goods and services are also more likely to adopt new innovations (Knowledge W.P. Carey 2006).

Accordingly the promotion of innovative entrepreneurship is the one of the most critical issues for public policy—what governance must to do in the area of public policy and how to do that.

Thinking about what might be the best ways for government policy to foster entrepreneurship it is important to understand the process by which entrepreneurial outcomes are generated (Figure 3).

![Figure 3. The Entrepreneurial Process](source: Joshua C. Hall, Russell S. Sobel (Hall and Sobel 2006))

Economic inputs and resources, such as venture capital and resource availability, are converted into entrepreneurial outcomes (new businesses created or patents issued). However, the amount of entrepreneurial outcomes generated from a given amount of economic inputs depends primarily on the rules of the game, or public policies, under which entrepreneurs operate. This model makes it clear that increasing entrepreneurship can be accomplished either by increasing the inputs into the process, or by improving the rules of the game for entrepreneurs (Hall and Sobel 2006).
The areas where innovative entrepreneurship intersects with government policy are large, from education, research and taxation, to laws covering immigration, accounting and securities regulations (Cukier 2006).

The OECD indicated such four main areas of entrepreneurship, in which governments should stress their actions: (1) Promoting conductive entrepreneurship cultures and framework conditions; (2) Increasing the participation of new firms and SMEs in knowledge flows; (3) Strengthening entrepreneurial human capital; (4) Improving the environment for social entrepreneurship and social innovation (OECD 2010).

The importance of innovative entrepreneurship is finally understood by most countries, but how to support it is not. Innovative entrepreneurship can be the purview of anyone, given the right environment and tools, and need not rely on inspiration or luck, but can be fostered (Cukier 2006).

In summary, the public policy is the main tool to foster innovative entrepreneurship through its action in different areas. However, there is the crucial task to find the ways to do that.

4. Concluding remarks

The concept of innovation is still mostly is defined as new or improved products and services or new methods of actions, but very occasionally is designated as the core element of entrepreneurship. Accordingly, the concept of entrepreneurship is often wrongly explained, just as business activity or the establishment of new enterprises without focus on innovation.

The strong linkage between innovation and entrepreneurship direct towards the adaptation of the concept of “innovative entrepreneurship,” including both mentioned elements as a condition for development of innovation activity. On one hand, the business sector keeps the essential role in the development of innovation activity. But, on other hand, it must have the entrepreneurial potential for the creation, development and commercial adaptability of innovation.

Public policy also plays an important role in building a favourable environment for the development of innovation with a view of achievement of sustainable economic growth and wellbeing of society. Therefore there is a requirement to strengthen the public sector’s initiatives in area of innovative entrepreneurship. The literature review underlines such main fields of public policy actions as entrepreneurial culture, education, investment, regulation and other environment conditions.

Innovative entrepreneurship should be the new direction for further researches in the innovation area. It is important to pay attention not only to the meaning and significance of this concept, but also to analyze how it interacts with other elements within the framework of innovative entrepreneurship and what is possible to do in public policy area for its development.
References


UŽUOMINA VIEŠAJAI POLITIKAI: INOVATYVI ANTPRENERYSTĖ

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Santrauka

Inovacijos neginčijamai akcentuojamos kaip vienas iš svarbiausių veiksnių, padedančių adaptuotis prie sparčiai kintančių aplinkos sąlygų bei užtikrinti įmonių konkurencijos galimybes ateities rinkose. Tačiau savaime inovacijos nėra savarankiškas reiškinys ir priklauso nuo įmonės turimo potencialo generuoti, taikyti ir komercializuoti naujas žinias bei valdžios paramos šios srities plėtra. Tuo tarpui antprenerystės koncepcija dažnai vis dar klaidingai apibrėžiama kaip verslo veikla ar stiebą svarbų įmonių sąlygų, neakcentuojant orientacijos į inovacijų veiklą. Todėl kaip pagrindinė straipsnyje analizuojama problema įvardijami inovacijų ir antprenerystės sąveikos ir viešosios politikos vaidmenų joje klausimai.

Straipsnyje analizuojamos skirtingus požiūris apimančios inovacijų ir antprenerystės sąvokos. Atliekus mokslinių šaltinių analizę, atskleidžianti tiesioginį inovacijų ir antprenerystės ryšį, pasiūlyta „inovatyvių antprenerystės“ sąvoka, integruojanti tris pagrindinius elementus: verslo įmones, antprenerystę ir inovacijas. Atsižvelgiant į antprenerystės raiškos formų įvairiavę, pasiūlyta antprenerystės tyrimų sričių klasifikacija. Taip pat išryškintas reikšmingas viešosios politikos vaidmuo skatinant inovacijas per antprenerystę, o tai galėtų tapti tolesnių tyrimų inovatyvio antprenerystės srityje kryptimi.