THEORETICAL FRAMEWORK FOR USING RESOURCE BASED VIEW IN THE ANALYSIS OF SME INNOVATIONS

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Abstract

The objective of this paper is to present a Resource based view of a firm as a valid conceptual framework for the analysis of SME innovativeness. This paper may serve future studies aiming at devising a methodology for estimation of the connection between resource categories of various enterprises and the implementation of innovation and growth in small and medium enterprises. Authors provide a thorough literature analysis and propose their own categorization of firm's resources. Morover, a critical review of innovation indicators and their congruency with research aims is provided within the paper.

Keywords: Resource based view, SME, innovations

Introduction:

Alongside with the changes taking place in world economics, that may be regarded as the end of industrial era and the rise of knowledge economics, a prominent place in business administration literature of USA and Europe is hold by Knowledge-Based Approach as a part of the Theory of the Firm. By this approach the role of an enterprise is clarified, in the ability to decrease the costs for information accumulation and knowledge procurement that would be much higher if incurred to an individual. Enterprises are figuratively compared to living bodies that grow and learn by the *Knowledge-Based Approach* as well as *Knowledge Management* related literature sources. Such approach is in fact a logical continuation of *Resource-Based View*, by which an enterprise is conceptualized as a unique packet of resources where the most important short-term competitive strength factors are its knowledge and capability or competence summation. *Knowledge-Based Approach* is used by literature sources in order to understand and estimate innovation implementation processes and their consequences in entrepreneurship. Although *Resource-Based View* and a derivative *Knowledge-Based Approach* were emerged from management studies referred to corporate management and large multinational organizations, some authors used later the theoretical conclusions of these concepts also in connection with management issues in small and medium-sized enterprises in the context of innovation implementation processes in these companies. It is supposed also by the authors of this paper that both *Resource-Based View* and a derivative *Knowledge-Based Approach* are utilizable in innovation analysis of small and medium-sized enterprises, but notable restrictions must be concerned proceeding from the transferal of the approach to an essentially distinctive research object.

Enterprise resources are analysed by the authors within a conceptual framework of *Resource-Based View*, by which the most important enterprise resources are considered to be those that ensure enterprise innovative activities contributing consequently to long-term competitive strength. In such a manner not the material resources and their availability are under the focus, but enterprise special competences, that are defined by scientific literature sources as the ability to produce innovations, observe commercial opportunities, produce new knowledge on the basis of the existing database etc.

Enterprise resources as the factor affecting growth and innovation

In recent years an increasing criticism of neoclassic economic theory based on inability of a traditional model to clarify the complicated economic processes and enterprise development lines and different tempo rates within the frame of one field is revealed by foreign business administration literatury sources. In the last couple of decades an observable progress is noted in the development of the Theory of the Firm. The paradigm of neoclassic economics under which an enterprise is considered as a „black box" and its processes are not conceived to be worthy of respect, is substituted by new, inter-disciplinary approaches trying to obtain a response to questions on enterprise existence targets, to explain the diversities in enterprise behavior as well as considers enterprises as living bodies that can learn and grow (Foss, 2006; Casson, 2005). This new approach suggests a different way of investigation of entrepreneurship system as opposed to entrepreneurship systems reviewed by traditional economic publications - those are focused on material goods and money flows between production enterprises while the new approach pays attention to information and knowledge flows.

Under the Theory of the Firm the *Resource-Based View* was produced in which an enterprise is defined as the summation of strategically important resources assisting in determination of advantages of long-term competitive strength and executed work of different enterprises in one field, owing to unicity and irreplaceability of these resources. Initially this approach was developed in strategic management field, but later it gained popularity also in other subdivisons of business administration studies, such as organizational behavior, international business etc. *Resource-Based View* is often related to social capital and innovation theories since the analysis of social network becomes one of the most important estimation tools in the last decades for enterprise growth and competitive strength as well as innovation (Uzzi, 1997; Gulati, et al., 2000). The further development of *Resource-Based View* is rewarded by success on theorization of *Knowledge-Based Approach.* An enterprise is conceptualized under *Knowledge-Based Approach* as a tool with which individual knowledge is transformed to market demanded goods and services. Here the integration of existing or newly produced knowledge of an enterprise becomes the most important task of a manager.

Resource-Based View is one of the various conceptions for strategic management which makes an attempt to clarify the background of enterprise existence as well as its various ocurrences in broader outlines of the Theory of the firm. The adherent scientists of the Theory of the Firm developed their conceptions build on the work of *Edith Penrose* who was the first to observe that company dependence on resource availability may differentiate significantly in the range of even a single field. In addition, a very broad layer of productive resource definitions was devised by her, including such factors as senior management teamwork abilities, entrepreneurship capability, ability to observe benefits of implementation of a new product or service. In her book *„The Theory of the Growth of the Firm"* (1959), growth of an enterprise is claimed by *Edith Penrose* to be dependant on realization and utilization of the resources. Consequently, an enterprise conception may not be reduced to a single production function and enterprise processes may not be considered only as a response to market situation. Quite the contrary, a company growth is claimed by the author to stem from a totality of management decisions that originate from the resources being at company disposal in return. Therefore, an enterprise growth is largely determinated by company manager experience and information accessibility as well as by available resources of an enterprise that serve as a basis for further strategies and line of activity.

In the following years Penrose's conception was developed in two interrelated approaches - *Resource-Based View* and *Knowledge-Based Approach.* The development of *Resource-Based View* was carried out with an emphasis put on identification and grouping of resources themselves, while *Knowledge-Based Approach* was moved forward making an attempt to estimate the most applicable methods of organizational resource management,

organizational structure to prompt innovation and learning, the role of a manager and allocation of decisive rights, processes of implementation of innovations and knowledge botn internally and externally.

On the basis of both theoretic conceptions, enterprise growth is affected rather by internal accumulation of knowledge than by external one on the market or in society. It is suggested under these approaches that enterprise competitive strength is affected by the position of enterprise resources rather than enterprise market position, which is confirmed, for example, by the model of Porter five forces analysis.

Resource typology

The origination of resource typology was encouraged by further development of *Enterprise Resource-Based View*. It became possible to group various resources and test those as factors affecting enterprise activity, to compare their impact with the impact of external environment factors etc. However, the utilization of varied terminology denominating, in fact, the same notions, is observed in scientific literature sources as well as sometimes, quite the opposite, denominating different resource categories by same terms.

J. B. Barney and *A. M. Arikan,* who are among the most prominent authors started latterly the discussion within the frameworks of *Resource-Based View*, do not further break up into categories. They suppose the exposition of *Resource-Based View* conception to be perplexed by this since it is considered necessary by every researcher to implement a new resource classification and to denominate by new words. As a result, distinctive publications and research projects on resources, competencies, capabilities, dynamic capabilities and knowledge originate.

The notion of resource is comprehended by other authors in the model of *Resource-Based View* as the summation of all enterprise capabilities – both financial and non-financial in their classic interpretation (considering e.g. buildings and capital as financial resources and licences and trademarks under non-financial resources), as well as enterprise abilities to maintain these resources, and knowledge about market, enterprise products and services etc. (Eriksen, Mikkelsen, 2006; Ray et al., 2004)

On the basis of the postulates of *Resource-Based View*, that consolidate the most important enterprise resources to be those that are difficult to imitate and replace, it may be concluded that the basis of the advantages of long-term competitive strength is formed by those resources that are related to the knowledge rather than information (which is comparatively easy to obtain and port with up-to-date information carriers). Therefore, enterprise competences build the most important enterprise resource group since they form exactly the sensitivity of an enterprise to variable conditions of the environment and make it produce innovations, consider new business opportunities etc.

The next line for the development of *Resource-Based View* utilizes the notion of *dynamic capabilities* or *absorbtive capacity* stressing the ability of developing new competences as the most important enterprise characteristics in today's changeable environment (Treece, Pisano, Shuen, 1997; Eisenhardt, Martin, 2000). In addition to this resource category in *Resource-Based View* the knowledge conception is integrated (Gold, Malhorta, and Segard, 2001; Canter, Joel, 2007). *Knowledge management* and *Knowledge Based View of the Firm* are separate branches based on *Resource-Based View* that are focused on knowledge production, acquisition and transfer in enterprises.

The border may be established among three main resource categories:

1. **material resources,** such as financials, buildings, equipment, technologies etc.;
2. **non-material resources**: brands, licences, emterprise reputation, cooperation networks, databases;

3. **competences**: knowledge, organizational abilities to use fixed assets, observed business opportunities, ability to produce new knoweldge on old basis, ability to produce innovations etc.

Relying on previously conducted studies, authors of this paper propose enterprise competences to be categorized as **basic competences** and **special competences**. The authors recommend to classify under basic competences such knowledge and capabilities that are necessary for performing daily activities and ensure the advantage of competitive ability, but cannot ensure long-term competitive ability and protect from competitor imitation. In their turn, special competences would be those that ensure long-term competitive ability of an enterprise since they are difficult to be imitated and replaced. In this context, basic competences are formed by human capital, willingness to learn, teamwork abilities as well as market and competitor knowledge, marketing analysis and its utilization in daily decision making. In their turn, special competences are those that contribute to innovation implementation in an enterprise and are routed in enterprise culture, social capital and business orientation.

The authors suggest their own definition for enterprise competences:

Enterprise competences are defined as the resource which is formed by summation of knowledge and capabilities; the adaptative abilities of an enterprise to the changes of external environment are determined by utilization of this resource.

Enterprise basic competences are defined as staff and management knowledge, capabilities and expertise, that are beneficial for an enterprise in performing daily activities as well as in developing a future strategy.

Enterprise special competencies are defined as enterprise capability to renovate the existing resources, produce new knowledge on the existing basis, observe new business opportunities and produce innovations.

Innovation conductive resources

Assuming the logic of *Resource-Based View* as a basis, the conception of *dynamic capabilities* developed by *David J. Teece*, *Gary Pisano* and *Amy Shuen*, gained prominence in scientific literature and provided grounding for the development of *Knowledge Based View.* Later the ideas of dynamic capabilities were developed by many other authors, as well as expanded definitions and clarifications of this term were produced by them (Eisenhardt, Martin, 2000; Hamel, Prahalad, 2006).

Although alternative denominations are used by some other authors, all of these denominations refer to the same occurence which is accepted to be named as dynamic competences. For example, Kogut and Zander (1992), who are considered to be the originators of *Knowledge-Based Approach*, use the term *combinative capabilities*, while *Amit and Schoemaker* (1993) present practically the same occurence by simple *capabilities*.

Dynamic competences are of high importance since they render assistance to an entreprise in production of new knowledge. In such a way, these competences form a background which is necessary for innovation implementation. Dynamic competences are integratable into conception of special competences since exactly the special competences are those that ensure enterprise ability to produce innovations and adapt to the changes of external environment.

The significance of innovation in obtaining of the advantage of competitive ability and achieving the highest financial indicators, as well as the decisive role of innovative competences in rapidly changing environment when it is not possible to forecast a future situation, was reviewed in various studies. (Snoj, Milfelner, Gabrijan, 2007; Prajogo, Ahmed, 2006; McEvily 2004; Shoham, Fieganbaum, 2002; Roberts, 1998).

According to *Hurley and Hult* (1998), organizational innovations are dependant on two factors –innovation oriented culture and ability to implement innovations (approach to

technologies, investigation and development). Consequently, it could be stated that the first factor is defined as enterprise special competences, and the second factor is defined in fact as financial resources, approach to technologies, investigation and development, which is largely dependant on financial assurance of an enterprise. It was acknowledged by many previous studies, where the impact of cultural (so called *soft factors*) and technological factors (so called *hard factors*) were tested separately from one another, that cultural factors are more important than technological factors since it is easier for competitors to get technologies than to create a relevant innovation oriented culture (Powell, 2006; McDonough, Kahn, 1996; Samson, Terziovski, 1999; Dow 1999).

Such factor as social capital is as important as organizational culture. Furthermore, such authors as *Bo Eriksen* and *Jesper Mikkelsen* (2006) use such social capital component parts as norms and sanctions as the analogue for organizational culture. However, social capital in the context of innovation implementation is usually understood as enterprise capability to cooperate with other market players. Cooperation renders assistance in obtaining of new and relevant market infomation, its participants, changes of external environment factors such as legislation, demand fluctuations etc., as well as in observing new business opportunities. In addition to this, cooperation is often necessary in order to divide innovation production and implementation costs (Inkpen, Tsang, 2006; Kogut, 2000). Cooperation with others (often with competitors) is especially important for small and medium-sized enterprises since expensive studies and development activities are not affordable for them due to limited financial resources (Roper, 1997; Ingram, Roberts, 2000). The importance of strategic alliance in various industries was proved by many previously conducted studies. The main conclusion of these studies is as follows: the cooperation of small and medium-sized enterprises with other players of their occupation field serves for increase of the number of innovative products and services (Lee, et al., 2001; Gulati, 1998; Ahuja, 2000).

A specific resource group that serves for increase of enterprise innovative potential and is defined as *entrepreneurial orientation* is the last but not least. This resource group and its impact on enterprise financial performance and innovations is reviewed in numerous studies. As the most important of these Lee et al. (2001), Atuahene-Gima, Ko (2001), Bhuian et al. (2005), Li, Calantone (2006), Lescovar-Spacapan, Bastic (2007) may be mentioned. The enterprise conception here is transferred from individual level to organizational level. By the same procedure as on the individual level, entrepreneurial orientation is related to the will of taking a risk, generation of new products or services and ability to observe new business opportunities. Therefore, entrepreneurial orientation is an important enterprise resource which is operated in empiric studies as development proactivity of new products and services, the will for innovation dominance in enterprise occupation field, as well as readiness of senior management to take a risk.

The analysis of most important indicators of enterprise innovative activity

The methodology of empiric studies related to innovative activity was also affected by changes in innovation paradigms. In prior years (seventies and eighties of the last century) the amount of investments in research and development and the number of introduced patents were used as two main indicators in surveying of innovative activity. It was closely connected with then dominant *technologically-economic paradigm*, as a part of which the emphasis was put on investigation of technological innovations. Despite the fact that these indicators are still used for the estimation of innovative activity and are marked by a great number of substantial advantages, they have much more disadvantages though. The research and development investments and patents may be classified as traditional innovation indicators.

As the most important advantages of research and development indicators the following may be mentioned. In Western European countries these indicators were carefully collected at the level of national statistics management since the fifties of the last century,

therefore they make a significant and trusted data source. This data is analysable by time lines and sector cross-cut, it may be broken down by investments in fundamental research, business research and development activities. But regardless all these positive signs, there are many serious drawbacks in research and development data (hereafter referred to as R&D). First of all, no information is presented by R&D about innovation results (namely the development of new product or service) and practicality of investments. It is possible to invest significantly in research and development that will not result in innovation comercialization though. Secondly, R&D indicators are only applicable to the analysis of production sector, not the service sector, since innovations here are usually implemented without investing in research and development (Smith, 2006; Sundbo, 2008). Thirdly, the innovation analysis based on R&D indicators may reduce to zero the work done by small and medium-sized enterprises where research and development activities are organized rather as fragmentary occurences than as a formal process. Fourthly, the R&D statistics, especially in small countries, is kept hidden – only aggregated data is available in order not to make it possible to estimate the costs of largest field players. This makes a big problem since the innovation statistics may only be meaningful if micro data is available for universities and other research institutions and is analyzable in various cross-cuts.

The next traditional innovation indicator group is compounded by patents and utlization of patents. They are usually used as the indicators of the work done on innovations. Similar to research and development statistics, patent database registration takes place for a long time by now, therefore the time lines are available. In addition, a doubtless advantage of this data is defined by its availability. However, the disadvantages of patents as innovation indicators are quite serious – some technologies, such as food products and services, cannot be patented. Small and medium-sized enterprises may deny the patenting of their products due to shortage of financial means. There is also a problem of an opposite nature – the largest part of patents were never and will never get commercialized. Therefore, the availability of a patent does not yet mean that an invention would transform to an innovation.

New innovation indicators that basically were developed under the *Community Innovation Survey*, consist of total innovation expenses, innovation proportion in an enterprise turnover, information sources engaged in the development of innovations, cooperation indicators.

Total innovation expenses as opposed to research and development expenses make a broader indicator, with which it is possible to estimate innovative activity investments of various types. In addition to this, these indicators are even lower in service sector that proves repeatedly the fact of research and development investments not to reveal a real situation of innovative activity status in service sector. Actually the greatest disadvantage of innovation expenses indicator is enterprise unability to provide a valid answer to this question (as it is in the case of investments in research and development), since these expenses are accrued from various balance positions and render a precise estimation difficult. Therefore, the reliability of this indicator is lower than that of R&D.

The innovative products proportion in enterprise turnover is a valuable innovation indicator since the real outcome of innovation activity is expressed by this, not only the investments made with the intention to achieve this result. However, the greatest disadvantage of this indicator is that a life cycle of a product is not considered by this which make an objective cross-sectoral collation impossible. The proportion of new products will be greater in those enterprises where product life cycle (*ceteris paribus)* is shorter, and vice versa. Therefore, in order to avoid systematic mistakes in this data interpretation, the questions must be supplied to surveys about average cycle of most important products and the data obtained about innovation products in enterprise turnover must be estimated with the consideration for this additional indicator. But this is not what really happens – no such questions were

included into the last Community Innovation Survey (CIS-4) collecting data on innovative activity indicators in 2005.

Throughout the years also the social capital indicators are included into Community Innovation Survey. The questions are made by Community Innovation Survey about information sources to be used by enterprises in the process of innovative activities as well as about cooperation with other enterprises, state or non-state organizations, universities and other research institutions. It is allowed by this data to conclude on enterprise social networks and the purpose to which specific organizations serve in these networks. However, a significant disadvantage of structural social capital indicators is that only the availability of contacts or their frequency at the best case are reviewed by them without paying any attention to the content and importance of such contacts.

Conclusion:

Resource Based View emerged as an alternative to the strategic management theories explaining competitive advantage of an enterprise with its market position. The founder of Reseource Based View was Edith Penrose who noticed that competitiveness of a firm varies considerably within one industry. Thus scientific community draw their attention to specific resources of a firm that are hard or even impossible to imitate by compatitors. Those specific reseorces are intangible, rare and difficult to imitate and replace. Later the notion of dynamic capacity was developed. Those are the capacities that allow creating new knowledge and adapting to changing environment. Dynamic capabilities can be accepted as the most important resource since they provide an assistance in production of new knowledge. Among dynamic capabilities are innovation oriented culture, ability to implement innovations, social capital in terms of cooperation with other market players and entrepreneurial orientation – willingness to take reasonable risks and ability to observe new business opportunities.

The asssement of innovations demand agreement on clear and coherent indicators of innovative activity of an enterprise. Before, the most widely used indicators for innovationa measurement were investements in R&D and the number of patents introduced by an enterprise. Though the biggest advantage of those indicators are their tracability (huge amounts of data are available, enabling usage of time series and other sophisticated tools for analysis), there are significant drawbacks in the usage of R&D and number of patents as the main innovation indicator (specially for analysis of SMEs). First of all, many small and medium enterprises do not have separate baudget for R&D activities. On the other hand, it is possible to invest large amounts of money into R&D without any significant results in the output of innovations. Moreover, investements in R&D are not applicable indicators for service sector. Similarly, number of patents can be viewed only as a proxy indicator for innovation analysis as number of patents does not correspond to the actual number of innovations. Similarly as with the previous indicator, patents are rarely used in service sector.

Thus there was a need to develop new innovation indicators. Such indicators as total innovation expences, innovation proportion in an enterprise turnover, as well as cooperation indicators are widely used nowadays helping to obtain broader overwiev of an innovation activity within small and medium enterprises.

References:

Ahuja, G. Collaboration networks, structural holes, and innovation: A longitudinal study, Administrative Science Quarterly, 45, 2000, pp. 425-455.

Amit, R., Shoemaker, P.,J.,H. Strategic Assets and Organizational Rent. Strategic Management Journal, 14,1993, pp. 33-46

Atuahene-Gima, K., Ko A. An Empirical Investigation of the Effect of Market Orientation and Entrepreneurship Orientation Alignment on Product Innovation, Organization Science, 12 (1), 2001, pp. 54-74.

Barney, B.J., Arikan A.M., The Resource Based View: Origins and Implications, in Hitt, M.,A., Freeman, R.E., Harrison J.,S. eds. Handbook of Strategic Management, Blackwell Publishers, Oxford, 2001, pp. 124-188

Bhuian, S.,N., Menguc, B., Bell, S.,J. Just entrepreneurial enough: the moderating effect of entrepreneurship on the relationship between market orientation and performance, Journal of Business Research, 58 (1), 2005, pp. 9-17.

Cantner, U., Joel, K. Functional Chains of Knowledge Management – Effects on Firm's Innovative Performance, Jena Economic Research Papers, 2007-080.

Casson, M., Entrepreneurship and the Theory of the Firm, Journal of Economic Behavior & Organization, 2005, 58, pp. 327–348.

Dow, D., Samson, D., Ford, S. Exploding the Myth: do all Quality Management Practices Contribute to Superior Quality Performance?, Production and Operations Management, 8, 1999, pp. 1-27.

Eriksen, B., Mikkelsen, J., Competitive Advantage and Core Competence, in Foss, N.,J.,Knudsen, Ch.ed. Towards a Competence Theory of the Firm, Routlege, London, 2006, pp.54-74.

Eisenhardt, K.,M, Martin, J.,A. Dynamic Capabilities: What are they? Strategic Management Journal, 21, 2000, pp. 1105-1121.

Foss, N.,J., Strategy, Economic Organization, and the Knowledge Economy: the Coordination of Firms and Resources, Oxford University Press, 2006.

Gulati, R., Alliances and Networks, Strategic Management Journal, 19, 1998, pp. 293-317.

Hamel, G., Prahalad, C.,H., The Core Competence of Corporation, Harward Business Review, 2006.

Hurley, R.,F., Hult G.,T.,M., Innovation, Market Orientation and Organizational Learning: An Integration and Epyrical Examination, Journal of Marketing, 68, July 1998, pp. 42-54

Ingram, P., Roberts, P.,W., Friendship among competitors in the Sidney hotel industry, American Journal of Sociology, 106, 2000, pp. 387-423.

Inkpen, A., C., Tsang, E.,W.,K. Social Capital, Networks and Knowledge Transfer, Academy of Management Review, 30(1), 2005, pp. 146-165.

Kogut, B. The Network as knowledge: Generative rules and the emergence of structure, Strategic Management Journal, 21, 2000, pp. 405-425.

Kogut B., Zander, U., Knowledge of the firm, combinative capabilities, and the replication of technology, Organizational Science, 3, 1992, pp. 383-397.

Gold, A.,H., Malhorta, A., Segars, A.,H. Knowledge Management: Am Organizational Capabilities Perspective, Journal of Management Information Systems, 18 (1), 2001, pp. 185-214

Lee, C., Lee, K., Pennings, J., M. Internal capabilities, external networks, and performance: A study on technology-based ventures, Strategic Management Journal, 22, 2001, pp. 515-640.

Leskovar-Spacapan, G., Bastic, M. Differences in Organizations' Innovation Capability in Transition Economy: Internal Aspect of the Organizations' Strategic Orientation. Technovation, 27, 2007, pp. 533-546.

Li, T., Calantone, R.,J., The impact of market knowledge competence on new product advantage: conceptualization and empirical examination, Journal of Marketing, 62 (4), 2006, pp.13-29.

McDonough, E.,F.,I., Kahn, K.,B., Using "hard" and "soft" techniques for global new product development, R&D Management, 26, 1996, pp. 241-253.

McEvily, S.,K., Eisenhardt, K.,M.,M., Prescott, J.,E, The global acquisition, leverage, and protection of technological competences, Strategic Management Journal, 25(8/9), 2004, pp. 713-722.

Penrose, E., T. The Theory of the Growth of the Firm, Oxford University Press, 1959.

Powell, W.,W., Grodal, S., Networks of Innovators, The Oxford Handbook of Innovation", Oxford, pp. 56-85, 2006.
Prajogo, D., I., Ahmed, P.,K. Relationships between innovation stimulus, innovation capacity, and innovation performance, R&D Management, 36, 2006, pp. 499-515.
Ray, G., Barney, J.,B., Muhanna W.,A. Capabilities, Business Processes, and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource-based View, Strategic Management Journal, 25, 2004, pp. 23-37.
Roberts, R., Managing innovation: the pursuit of competitive advantage and the design of innovation-intense environments, Research Policy, 27, 1998, pp. 159-175.
Roper, S. Product Innovation and Small Business Growth: A Comparison of the Strategies of German, U.K. and Irish Companies, Journal of Small Business Economics, 9, 1997, pp. 523-537.
Samson, D., Terziovski, M., The relationship between total quality management practices and operational performance, Journal of Operations Management, 17, 1999, pp. 393-409.
Shoham, A., Fieganbaum, A., Competitive determinants of organizational risk-taking attitude: the role of strategic reference points, Management Decision, 40 (2), 2002, pp. 127-141.
Snoj, B., Milfelner, B., Gabrijan, V., An Examination of the Relationships among Market Orientation, Innovation Resources, Reputational Resources, and Company Performance in the Transitional Economy of Slovenia, Canadian Journal of Administrative Sciences, 24, 2007, pp. 151-164.
Smith, K., Measuring Innovation in The Oxford Handbook of Innovation, Oxford University Press, 2006, pp.148-177.
Sundbo, J. The balancing of enpowerment. A strategic resource based model of organizing innovation activities in service and low-tech firms, Technovation, 16 (8), 1996, pp. 397-409.
Teece, D.,J., Pisano, G., Shuen, A. Dynamic Capabilities and Strategic Management, Strategic Management Journal, 18(7), 1997, pp. 509-533.
Uzzi, B. Social Structure and Competition in Interfirm Networks: The Paradox of Embeddeness, Administrative Science Quarterly, 42 (1), 1997, pp. 35-67.