

BARRIERS TO THE INNOVATIVE ACTIVITY OF ENTERPRISES IN GREATER POLAND AND THE EXPECTED WAYS TO OVERCOME THEM

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Abstract. The article contains the results of research carried out in 2011–2012 among the three groups of respondents, i.e. industrial enterprises, science and business environment. The cognitive aim of the study is to present barriers and intensity ratings of their occurrence in the development of corporate innovativeness in Greater Poland and future plans for the growth of innovation. The functional objective is to develop a growth model of the innovativeness of enterprises. The results are interesting due to a variety of methods used, i.e. an interview method, a survey method, a comparative method, a statistical method and model method. The problem of the future behaviour of entrepreneurs regarding the growth in innovativeness is not recognized in literature. Moreover, the study of barriers to innovativeness requires a regional approach. Therefore, the subject of this paper and the ways of its implementation are innovative in terms of results. In the course of the process a lot of attention was paid to intangible barriers with regard to the resource business theory. An important achievement of the authors is determination of the expected role of innovation in building competitive advantages of companies.

Key words: innovativeness in business, barriers to innovative activity, building competitive advantages, innovativeness growth model

INTRODUCTION

According to the authors, the following reasons justify the chosen topic:

- first, the need for continuous improvement of the growth models of innovativeness for the practical operations of companies in economic and social spheres;
- second, companies play in this process an essential role in cooperation with the entities of science and business environment.

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The development of innovative companies can be considered in terms of the past, the present and the future. The inspiration for new look and analysis of the phenomenon of innovativeness was based in the early twentieth century on J.A. Schumpeter's determination of the concept of innovation [Schumpeter 1928] and his documentation that the stimulation of development required important institutional, social, cultural and political factors [Schumpeter 1939]. They are the causative agents of the economic growth of regions. In time, the category of innovation has widened, e.g. by including social innovation, especially regarding silver economy and crowdsourcing. Today, there is also a consensus that not all innovations fulfill their function of progress in the development, as some of them appear to be sham or bad (harmful to health and the environment).

In turn, future innovations constitute great hope for societies for the solution of environmental threats, as well as issues of social inequality – particularly the growth of occupational activation of the population and the quality of life. It is expected that in the management of change economic entities will take into account the paradigm of sustainable development [Strategy 2020], and new ideas, concepts and discoveries will be geared to meet the needs of society. Therefore, it is now necessary to strengthen the chances of such processes and reduce the difficulties arising along the way. What is more, "change is a continuous process without any exact destination" [Clarke 1997].

In the light of the current measures of innovativeness used in the rankings of the European Union and the OECD [IMD 2013, IUS 2014] and the global ranking [GII 2013], Poland represents quite a low position. Moreover, previous attempts to conduct changes for the better have not yielded any expected results. Numerous reports, surveys, monographs and other scientific works were developed in Poland. There, the authors undertook a variety of aspects to explain this adverse phenomenon. As a result, we know what needs to be done to change it for the better. But there are different views and answers to the question of how to achieve this. This is a difficult problem as at during the IX Congress of the PTE (November 2013) more than 30 papers were reported, which directly and indirectly related to innovativeness [Economics for the Future 2013]. This supports the view of W. Świtalski that "the processes of creation and diffusion of innovations are characterized by complex and not entirely known nature. The creation of something new and submitting this to the market test [...] requires a strong will, motivation and courage". [Świtalski 2005]. To join the trend of the discussion a study was performed in 2011–2012 and its results are presented below.

The cognitive goal of this article is to present the status and intensity of barriers to the development of innovative enterprises in Greater Poland and the expected ways to reduce them. The idea was to determine the type and severity of limitations and the future plans for coping with them in the opinion of respondents – representatives of companies, innovation experts. The functional objective is to develop a growth model of the innovativeness of enterprises.

METHODOLOGY

The study included three population groups: enterprises, universities and business entities. The group of companies concerns the manufacturing industry – Section C, and they are considered to be innovative on the basis of their participation in the PNT-02

study [Report on innovations... 2012] for the CSO in 2011. One thousand SMEs and large companies were drawn, taking into account the proportion of the volume of employment under different headings of Section C (Chapters 10–33). In 2011 they received survey forms on-line and at the same time via standard post, with the vast majority of closed questions [Marketing Research... 2012]. The survey included cognitive parts, which corresponded to the structure of the present article 259 correctly filled in questionnaires were returned. The structure of this sample was dominated by the SMEs (208). In contrast, companies that employ above 250 people amounted to 44, including 17 above 500 people, and 7 micro-enterprises.

The second community was composed of colleges. Direct interview was conducted in 2012 among 62 academic researchers selected on purpose, belonging to the group of innovators and working at faculties and research institutes in Greater Poland, having a close relationship with the innovations of various types – mostly technological. The criterions for selection of respondents were the grounds of merit and willingness to participate in the study. They represented the engineering sciences, medicine, and social sciences in the following proportions: 50, 22.6, 19.4 and 8%.

The third business community is formed by business environment divided into two groups. The first contains 17 units of financial support operating in Greater Poland, entitled and obliged to implement the function of the growth of innovativeness in the region. The study was conducted in autumn 2012. The structure of this group included 8 commercial banks, 3 non-governmental foundations, and 6 private companies. The second group consists of 11 units of technological infrastructure¹. Their selection was purposeful and based on the principles of a desire for voluntary cooperation. The study was based on direct interviews conducted among the representatives of those organizations.

The characteristics of the research methodology can be seen in Figure 1. It should be noted that in the innovation ranking the region of Greater Poland ranks the 5th in Poland [Zalewski 2011] and the results obtained from such a large trial can be considered as representative not only for the region but also for possible generalizations regarding the entire country.

BARRIERS TO THE DEVELOPMENT OF INNOVATIVE ENTERPRISES IN GREATER POLAND

In the beginning, it is worth noting that the barriers to innovative activities of companies have been subjects of investigation by the CSO in the PNT-02 form. Factors mitigating the innovativeness of companies were divided there into economic, market (demand), related to knowledge (information) and others [Zalewski 2013].

There is, however, a lack of intangible barriers that in KBE play a strategic role in economic processes (social capital, intellectual property protection, human capital etc.). Opinions regarding these barriers to the development of innovation are very important [Obłój 2007]. Therefore, in the present study the division of the barriers included internal, external and separate ones regarding cooperation, but special attention was paid to the in-

¹Centers to promote entrepreneurship, innovation incubators and economic foundations.

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Fig. 1. Application of the test method in the experimental process in the implementation of the goal of this paper

Source: Own study.

tangible factors inherent in these barriers. The type of barrier was determined taking into account the order (the given rank) and the frequency of respondents' replies. The intensity was identified by the evaluation of statements listed in the questionnaire on a scale of 1 to 5, where: 1 means very high intensity, 2 - high, 3 - average, and 4 and 5 - low.

Turning to the analysis of the results of internal conditions, we find a large convergence of views of three groups of entities regarding the barriers to innovativeness. The analysis of the capacity to generate and commercialize innovations by those employed in the science sector points to high level of restrictions to social and human capital, but above all, restrictions to financial and formal institutions (Table 1). The structure of responses from the science sector employees indicates that 66% of them consider administrative and legal barriers as medium, and 25% as high. An even higher level of intensity of the internal barriers that exist in both human and social capital was indicated by the respondents of companies and technological infrastructure units in the business environment. It is difficult to miss that the material and financial barrier in the last two groups of entities was assessed as low and medium.

By analyzing a detailed structure of human (20 attributes) and social (13 attributes) capital, we find that the analyzed collectivities possess not only a low level of personal social capital, but they also lack any network of relationships, which does not create any added value of this capital. As a result, group social capital can sometimes be even lower than the personal one as a result of its destruction and the emergence of negative

	Barriers				
Entities	equities			- huroquaratia admini	
	material social hum and financial		human	strative institutions	
Manufacturing industry enterprises	++	+++	++++	++	
The sphere of science	-	+	++	-	
Business environment					
 – financial support 	+	+	+	-	
- parks, incubators, innovation centers		++	++	+	

Table 1.	The intensity of the internal barriers of innovative activity of three groups of entities in
	the light of empirical research in Greater Poland

Intensity Rating: +++ high, ++ medium, + low, - very high. Source: Own study.

social capital (e.g. nepotism). This translates into a small innovative individual and collective capital understood as the innovative potential to create² the realm of new ideas by employees and their further implementation. The concepts of knowledge emergence are based on the existing networks of creative people. Despite the impact of globalization on the forms of communication between people of distant countries, close contacts within small communities and between them remain very important. They are based on trust and knowledge sharing within networks, which then become more innovative. The literature explains the importance of relational closeness for cooperation in networks [Czakon 2010]. In the construction of innovation networks, geographical proximity is more important for the biotechnology industry, and less for the automotive industry. Today, the emergence of the local innovativeness system, therefore, also affects the structure of the industry, as well as the institutional and organizational, cognitive and social proximity of entities. Then "social capital stimulates innovations, education and self-education, as well as labor productivity growth and is as important as both physical capital and human capital" [Putnam 2007]. Thus, one cannot contest research achievements, which show that it is primarily social capital that shapes the creativity and subsequently its transformation into innovation through commercialization. The transmission of knowledge is conditioned by the level and structure of social capital, leading to a climate of innovation through its impact on supply and demand for innovations and cooperence³. But those attributes of social capital are important that promote common time spending and building teamwork by ties of varying degrees of formality. It turns out, that this affects the choice of methods of diffusion and absorption efficiency of new technologies. The analysis of some dimensions of social capital as reflected in the reports of the IMD and the referred studies can ascertain that in the Polish conditions they constitute a significant barrier to innovativeness and are contained mainly in the group of structural attributes (reliability, loyalty, cooperation in a group) and the cognitive ones (trust, openness, ethics,

²Innovation capital is understood as intellectual capital and creative powers.

³Cooperence is the type of relationship between competitors which takes into account cooperation in creating value and competing for its division to achieve common benefits [Skawińska, Zalewski 2008].

acceptance of others), and to a lesser extent – behavioural ones (activity, communication) [Skawińska 2011].

Interestingly, the representatives of the technology transfer units also pointed to internal intangible barriers. They are the following resources and attributes of human and social capital:

- distrust for the cooperative activities and to organize joint business ventures;
- distrust between the representatives of science and business;
- insufficient level of pro-innovation attitudes and behaviour among entrepreneurs;
- small number of technological implementations by research institutes and research units;
- insufficient level of pro-innovative attitudes and behaviour among representatives of science and R&D sector;
- too low level of individual social capital of employees;
- lack of specialists who could perform a professional market analysis of inventions;
- lack of specialists to evaluate the market value of innovations.

We note, however, that particularly in the implementation stage of innovation, the activity of all three spheres of entities in cooperation is important, i.e. science, business and the business environment. Of all the innovative companies, 20% (as indicated by the study) partnered with scientific units. This demonstrates that among the remaining companies there were no contacts and business relationships between those entities. This is confirmed by national studies which indicate that in 2011–2012 cooperation with the science sector was undertaken by 2% of SMEs [Operational Programme... 2013]. An analysis of the conditions in this phase of innovation activities (in the opinion of the representatives of the three spheres) points to their large internal constraints on human capital and social capital, and the risk of promotional and organizational character (Table 2). The basis for the latter were the answers to the following questions: Do you know how to reach scientists/scientific institutions interested in implementing innovations?, If you have not cooperated with the sphere of science, why is that (9 statements to choose from)?

State capital and diversity of innovativeness in the field of scientific units justifies the request for an increased funding for research in this sphere of organization and concentration of innovative activity. In turn, among organizations that provide financial support

			Barriers					
promotiona	l financial	capital						
et and organizational	a- reinforcement	human	social					
++	+	++	++					
+	++	++	++					
++++	+ ++	++ +	++ +					
	et and organizi tional ++ + + +	et and organiza- tional financial reinforcement +++ + + +++ + +++ + +++	et and organiza- tional financial <u>top</u> reinforcement human +++ ++ + +++ + +++ + +++ + +++ + +++ + +++ + +++ + +++ + ++++++ + ++++++++					

Table 2. The intensity of the barriers preventing the cooperation of the three groups of stakeholders in the implementation of innovation in the opinion of the respondents from the region of Greater Poland

Symbols and source as in Table 1.

there is an urgent need to disseminate knowledge about innovations. Increased awareness and knowledge on the subject of the management of these units will facilitate the formation of trust in building relationships and cross-organizational collaboration. The main barrier here is the quality of human resources and social capital of the employed. What is needed is a greater awareness of the active involvement of banks in the risk assessment of ongoing applications to fund innovative projects.

Although the barriers to the development of the cooperation between industrial companies and the national sphere of science, regarding innovativeness, are quite complex (in the opinion of respondents), they are mainly related to the lack of knowledge, information and offers about such possibilities on the part of scientific units and R&D, even though there are already multiple open innovation platforms. This indicates the weakness of cooperation between the two spheres and the phenomenon that both economic and scientific entities deal with their own businesses without the need to "attract one another". The argument for doing so is located in the high price and the bureaucracy of billing the services of the science sector.

Verifying the subjective opinions of respondents on barriers to collaboration, it can be seen that they are situated on the side of non-capital assets. To a large extent, they arise from the lack of involvement and networking skills and the use of existing information and the difficulty in accepting new things. There is also a lack of understanding of the benefits of cooperation, because the majority of companies rely on the use of traditional sources of competitive advantage. An opportunity to improve cooperation lies in the reduction of these limitations through an increase in expenditures for science and their control, improved motivation and the sphere of regulation.

The innovative activity of entities is also determined externally. Again, the conditions for innovative activity occurring on the side of the market, regional and national policies are perceived by actors with varying intensity. It is higher regarding science and manufacturing, and lower in the business environment. The main barriers are listed in Table 3.

	Barriers			
Entities	market	formal institutions	innovation policy of the state and region	
Manufacturing industry enterprises	++	+++	++	
The sphere of science	+	+++	+++	
Business environment – financial support – parks, incubators, innovation centers	++ ++	+++++	++++	

Table 3. The intensity of the internal barriers to innovative activity of the three groups of entities in the light of empirical research in Greater Poland

Symbols and source as in Table 1.

These barriers are of the following character:

- market (low economic power of a company, limited ability to partial self-financing, low demand for innovation), small supply of funds for innovation);
- formal institutions (legal, administrative, procedural);
- policy of the state and regional authorities (small support for the authorities of the region, little inspiring innovation policy).

FUTURE PLANS IN THE ACTIVITIES OF COMPANIES TO INCREASE INNOVATIVENESS

The studies also had to answer the question of whether businesses need to build competitive advantage through innovation, in the belief that "companies achieve sustainable competitive advantage through innovative activities and gaining technological leadership" [Porter 2001]. The question was: Which markets in your view will create the greatest opportunities for growth of innovativeness in the next 5 five years in Poland? It turns out that according to the respondents, within the next 5 years opportunities to boost innovativeness in companies will be seen in the development of technology and organic products and energy-efficient markets. It seems that the evaluations of respondents expressed willingness to choose the future of innovative activities of enterprises to areas of support by the EU funds (ICT electronics, sustainable energy, fuel etc.). Thus, the issues of innovation taking into account demographic processes and also social services, health, education markets and new global trends in the development of smart markets are not fully appreciated.

In the future, competitive advantage of innovative activities, as envisaged by the respondents, will be based on the sources of quality, cost and collaboration with customers. In the light of KBE challenges these measures are conservative and traditional. In contrast, new sources, such as changing the structure of the organization (alliances, clusters, new business models, new marketing instruments, cooperation with a competitor) attract little attention, although they are noticed.

This conclusion corresponds with respondents' perception of the validity of prospective measures to enhance innovativeness. Of the eight possible actions listed in the questionnaire, some replies indicated the need to improve quality, customer service and reduce costs. Moreover, the same indications regarded the activities already undertaken in recent years to strengthen the innovativeness of companies. In addition, although with less intensity, the indications pointed to the monitoring of the sources of innovations, cooperation with foreign companies, knowledge management, information and better employee motivation to submit innovative proposals. The following activities did not gain any significant recognition: the analysis of innovation market risk, functional flexibility of employees, etc.

Future actions foreseen by the representatives of the companies probably are a step forward in the light of the gap of innovativeness in Poland, but it is not sufficient. There is small emphasis on cooperation within the framework of the triple helix, prosumption and structural and organizational changes.

A hope for pushing the development of innovations at the micro-level (companies) is in the statements of the respondents (about 70%) from the industrial sector to initiate or continue their innovative activity. This is supposed to facilitate reaching talented workers within the framework of the improvement of human capital management. Among the ways to reduce the barriers to innovative activity, the following ones are listed here: cooperation with competitors, with the realm of science, banks and IT sector. It should also be noted, that among the used instruments of human capital management, to enhance innovative activity of enterprises, the main role is played by the support of the process of education of employees, the improvement of the system of their integration and motiva-

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tion and internal communications. This may increase the level of corporate social capital (trust, norms and values, entrepreneurship), which affects the development of informal relationships between employees and in a network of organizations, and shapes an increase in innovativeness.

ENTERPRISE INNOVATIVENESS GROWTH MODEL

On the basis of the findings it can be concluded that the innovative potential in enterprises is composed of both human capital and social capital. The quality of results stems from the state policy in the field of both formal and informal institutions, as well as the used instruments of fiscal and monetary policy. It has remained hidden until recently. It becomes relevant to monitor the sources of innovative capabilities within individual entities and through cross-organizational collaboration. However, there arises a question of its sufficiency to overcome the mentioned innovation gap, in relation to the leading countries. It is necessary to adopt strategies for a strong growth of this potential in the innovative policy of the state. This view is reflected in the simplified spiral model in Figure 2. It includes the impact of institutions in behavioural terms (both formal and informal) on innovations and an increase in corporate innovativeness.



Fig. 2. Company innovativeness growth model Source: Own study.

In the interpretation of the assumptions for the proposed corporate innovativeness growth model it is noteworthy, that innovation policy is shaped by the Polish National Innovation System (NIS), although it, in turn, is part of the created European Innovation System (EIS). Thus, considering these dependencies and the fact that innovation policy is understood as instruments and means of regulating the market of innovation and activation tools for innovative activity of companies, it has been positioned inside the model in the first place. The further chain of causal impulses is as follows. NIS affects regional innovation policy and together they impact the growth potential of innovative enterprises (points 2–7 in Figure 2). This, in turn, causes the growth of innovations as a source of competitive advantage, which results in an increase in the financial strength of companies

and self-financing of innovative activities and an increase in its value. An innovative culture is created and the competitiveness of businesses grows (points 8–13 in Figure 2). In the long term a regional innovative environment is formed.

CONCLUSIONS

The directions for improvement of the growth of innovativeness in Poland stem from numerous research projects conducted by different authors, e.g. Poland... [2013], Raport... [2011], Impact... [2012], Hausner [2012]. The mentioned results that refer to the three groups of subjects are consistent with the achievements of those authors. For example, they refer to the barriers to innovative activity. In the sphere of science these are very favourable conditions for the conceptualization of innovations as a result of excessive bureaucracy, the lack of effective protection of intellectual property, inadequate funding of basic research and development and a negative selection of personnel. The ratings of companies also reflect a visible material-financial barrier and an unfavourable structure of investment in innovations. In addition, the modern understanding of the sources of creation, diffusion, implementation and absorption of innovations requires cooperation between entities. In turn, such cooperation is possible, if facilitated by the quality of human capital and social capital [Skawińska 2011]. Meanwhile, the results of the study indicate that these intangible factors form barriers to companies, universities and business environment units. Therefore, they do not enforce their cooperation. Therefore, the role of external entities (suppliers, customers, universities) in creating innovations is small. In this context it is worth recalling the thought of Ewa Okoń-Horodyńska, who stresses that "innovations [...] are the first and far-reaching social collective effort, a cooperative process [...], which always requires a long-term perspective" [Okoń-Horodyńska 2013].

In addition to confirming the earlier results of other authors, these studies also make a contribution to the literature with the recognition of the importance of innovation in shaping competitive advantage of companies in the next five years. Their results are not entirely favourable in relation to the intangible factors. Therefore, in order to reduce the identified barriers, it has been proposed to implement the proposed spiral model of innovativeness growth, which has identified the importance of innovation policy of the state as the causative entity.

REFERENCES

Badania marketingowe w zarządzaniu organizacją [Marketing Research in Organization Management], 2012. Eds W. Popławski, E. Skawińska. PWE, Warszawa.

Clarke L., 1997. Zarządzanie zmianą [Change Management]. Gebethner i Ska, Warszawa.

Czakon W., 2010. Hipoteza bliskości [Proximity hypotesis]. Przegląd Organizacji 9, 16-21.

Ekonomia dla przyszłości. Materiały IX Kongresu Polskiego Towarzystwa Ekonomicznego, 2013. [Economy for Change. Proceedings of IX Congress of Polish Economical Society], Warszawa 28-29 November. GII, 2013. Global Innovation Index 2013, http://www.johnson.cornell.edu/gii/

- Hausner J., 2012. Kurs na innowacje. Jak wyprowadzić Polskę z rozwojowego dryfu [Course on innovation. How to pull out Poland from the development drift]. Biuletyn PTE 3.
- IMD, 2013. World Competitiveness Yearbook 2012, Lousanne. Switzerland.
- IUS, 2014. Innovation Union Scoreboard 2014, http://(ec.europa.eu/enterprise/.../innovation/.../ius-2014 en

Obłój K., 2007. Strategia organizacji [Strategy of Organization]. PWE, Warszawa.

- Okoń-Horodyńska E., 2013. Polityka innowacyjna w Unii Europejskiej: przerost formy nad treścią? (w:) Ekonomia dla przyszłości. Materiały IX Kongresu Polskiego Towarzystwa Ekonomicznego [Innovation politics in European Union: excess of form? (in:) Economy for change. Proceedings of IX Congress of Polish Economical Society], Warszawa 28-29 November.
- Polska. Raport o konkurencyjności 2013. Wymiar krajowy i regionalny, 2013. [Poland. Competitiveness Report 2013. Domestic and Regional Dimension]. Ed. M.A. Weresa. Wyd. IGŚ SGH, Warszawa.
- Porter M.E., 2001. Porter o konkurencji [On Competition]. PWE, Warszawa.
- Program Operacyjny Inteligentny Rozwój 2014-2020. Projekt, 2013. [Operational Programme Smart Growth Program Operacyjny 2014-2020. Project]. Warszawa, kwiecień/April.
- Putnam R. (za J.J. Sztaudynger), 2007. Społeczne problemy wzrostu gospodarowania analiza ekonometryczna (w:) Etyka i ekonomia [after J.J. Sztaudynger, Social problems of growth management – econometeric analysis (in:) Etics and economy]. Eds B. Klimczak, A. Lewicka. PTE, Warszawa.
- Raport o innowacyjności Polski w 2011 roku. 2012. [Raport on Innovativeness of Poland in 2011]. Ed. T. Baczko. Wyd. INE PAN, Warszawa.
- Schumpeter J.A., 1928. The Instability of Capitalism. The Economic Journal, September.
- Schumpeter J.A., 1939. Business Cycles (after: E. Okoń-Horodyńska). Innovation politics in European Union: excess of form? Economy for Change. Proceedings of IX Congress of Polish Economical Society, Warszawa 28-29 November 2013.
- Skawińska E., 2011. Dormant resources for the increase of enterprises innovativeness in Poland. Folia Pomerainiae Universatis Technologiae Steinensis. Seria Oeconomica 65, 133–144.
- Skawińska E., Zalewski R.I., 2008. Klastry biznesowe w rozwoju konkurencyjności i innowacyjności regionów. Świat – Europa – Polska [Business Clusters in Competition and Innovation Development. World – Europe – Poland]. PWE, Warszawa.
- Strategia 2020. European Commission: EUROPE 2020 A strategy for smart, sustainable and inclusive growth, Brussels, 3.3.2010, COM(2010)2020, http://ec.europa.eu./europe2020/ index_en.htm
- Świtalski W., 2009. Rozwój europejskich regionów: wybrane problemy i drogi poszukiwania rozwiązań (w:) Konwergencja gospodarcza Polski [Development of European Regions: Selected Problems and Ways of Solving (in:) Economic Convergence in Poland]. Ed. Z.B. Liberda. PTE, Warszawa.
- Wpływ funduszy strukturalnych UE na transfer wiedzy do przedsiębiorstw, 2012. [Impact of EU Structural Funds on Knowledge Transfer to Enterprises]. Ed. J. Kotowicz-Jawor. Wyd. INE PAN, Warszawa.
- Zalewski R.I., 2011. Aktywność innowacyjna województw w Polsce w latach 2006–2008 [Innovation activity of Polish regions 2006-2008]. Przedsiębiorstwo Przyszłości 4(9), 16–30.

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Streszczenie. Artykuł zawiera wyniki badań wykonanych w latach 2011–2012 wśród trzech grup respondentów, tj. przedsiębiorstw przemysłowych, nauki i otoczenia biznesu. Celem poznawczym pracy jest przedstawienie barier i ocen intensywności ich występowania w rozwoju innowacyjności firm w Wielkopolsce oraz przyszłych zamierzeń dla wzrostu innowacji. Celem aplikacyjnym jest opracowanie modelu wzrostu innowacyjności przedsiębiorstw. Wyniki są interesujące dzięki zastosowaniu wielu metod realizacji celu, tj. metod: wywiadu, ankietowej, porównawczej, statystycznej i modelowej. Problem przyszłych zachowań przedsiębiorców w zakresie wzrostu innowacyjności nie jest w literaturze rozpoznany. Co więcej, badanie barier innowacyjności również wymaga podejścia regionalnego i dlatego temat pracy oraz sposoby jego wykonania należą do nowatorskich w aspekcie wyników. W przebiegu badanego procesu zwrócono szczególną uwagę na bariery o charakterze niematerialnym z uwzględnieniem zasobowego nurtu teorii przedsiębiorstw. Ważnym osiągnięciem autorów jest określenie przewidywanej roli innowacji w budowie przewag konkurencyjnych firm.

Słowa kluczowe: innowacyjność przetwórstwa przemysłowego, bariery aktywności innowacyjnej, budowa przewag konkurencyjnych, model wzrostu innowacyjności

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