# STRATEGIE INNOWACJI MAŁYCH I ŚREDNICH PRZEDSIĘBIORSTW W POLSCE

# INNOVATION STRATEGIES OF SMALL AND MEDIUM ENTERPRISES IN POLAND

## Anna Strychalska-Rudzewicz, Jacek Wysocki

### Abstract

Celem artykułu było m. in. uzyskanie odpowiedzi na pytanie czy badane małe i średnie polskie przedsiębiorstwa innowacyjne podejmują planowe działania w zakresie innowacji oraz czy stosują i z jaką częstotliwością strategie w działaniach innowacyjnych. Z badania empirycznego wynika, że tworzenie innowacji nie jest priorytetem w analizowanych firmach. W znacznie większym stopniu przedsiębiorstwa deklarują konkurowanie jakością, dążąc przy tym do obniżenia kosztów. Na podstawie przeprowadzonego badania można sądzić, że czynnikami skłaniającymi przedsiębiorców do bardziej ekspansywnych działań innowacyjnych są: funkcjonowanie na rynku wzrostowym i koncentracja na produktach jednej branży oraz posiadanie komórki badawczo-rozwojowej.

Keywords: strategie innowacji, małe i średnie polskie przedsiębiorstwa

## Abstract

The paper aimed, among others, at obtaining the answer to the questions whether the Polish small and medium enterprises surveyed undertake planned activities in the field of innovations and whether they apply, and with what frequency, strategies in innovation activities. The empirical survey indicates that creating innovations is not a priority in the companies surveyed. Much more frequently the enterprises declare competing on quality aiming at the same time at decreasing the costs. On the base of the survey conducted it can be concluded that functioning in the growing market and concentration on products of one industry as well as possessing the research and development unit are the factors inducing entrepreneurs to undertake more expansive innovative activities.

Key words: innovation strategies, small and medium Polish enterprises

# 1 IMPORTANCE OF THE INNOVATION STRATEGY IN CREATING INNOVATIONS

Small and medium enterprises in the developed countries are significant creators of numerous innovations. The activity of enterprises in the field of innovation offers them the best chances for securing increase in their competitiveness. As presented by the experiences of the highly developed countries, without introducing new and improved old products and services the enterprises would not be able to compete effectively as their survival and success depend increasingly on the attractive market offer. Innovative activity, as a consequence, is the key condition for competitiveness of enterprises and the increase in innovativeness of the enterprise should not be the result of incidental activities but the consequence of the purposeful innovation strategy (Poznańska 2001). Many researchers analyse also the correlations between strategies of enterprises and their innovativeness and introduction of

new products (Jaworski, Kohli 1996; Paladino, 2008). The strategic orientation of the organisation may play the key role in development of the structure of its activities and initiatives undertaken (Kickul, Walters 2002).

From the perspective of the general definition, the innovation strategy is defined as the long-term action plan prepared for the purpose of managing innovations that is the process of searching for such types of innovations, on the base of the available resources, which would increase the market effectiveness of the enterprise (Pomykalski 2001). Organisations that focus on rapid response to changes and adapt the innovation strategy may identify new opportunities and ideas necessary for their operation better. Such organisations conduct continual search for the place in the market for new products. They invest more in research and development work as well as marketing activities. They also focus more on the new opportunities for product development. Organisations possessing innovation strategies are creators of changes in the industries in which they operate. Their functioning is based to a large extent on monitoring the environment for the purpose of identifying new opportunities necessary for their success (Lescovar-Spacapan, Bastic 2007).

Strategic orientation of the organisation may play the key role in determining the structure of its activities and initiatives undertaken (Kickul, Walters 2002). Organisations that focus on rapid response to changes and adopt the innovation strategy may identify new opportunities and ideas necessary for their functioning better. Such organisations conduct continual search for the place in the market for new products. They invest more in research and development work as well as marketing activities. They also focus more on the new opportunities for product development. Organisations possessing innovation strategies are creators of changes in the industries in which they operate. Implementation of innovations is becoming one of the strategic goals of the enterprise while negligence of innovations would result in market failure sooner or later. Strategic initiatives, however, should have the formalised formula because effective implementation of the innovation strategy that would offer decreasing the costs and achieving competitive advantage is time-consuming, frequently requires costly research and qualified personnel. Otherwise the innovation implementation may end in failure because of, e.g. extensively long time of preparation for production or not appropriately considered marketing and promotional activities. In various situations and for different enterprises the theories of innovation may have different meanings. Implementation of the strategic innovation theory is important in case of companies with significant customer focus, e.g. service organisations, low technology enterprises, flexible production businesses. According to Lescovar-Spacapan, Bastic (2007) this is the most common type of enterprises nowadays.

The concept of strategy in the strategic theory of innovation represents a combination of the approach focused on market oriented competition and the approach focused on the internal processes. No exhaustive and systematic evaluation that could provide the answer to the question of which factors – internal or external – are of the top importance for creating innovations in industrial enterprises has been conducted so far. The results of such evaluations would probably differ between industries. Sundbo (2001) believes that the need for interpretation and transforming the external factors into actions that result in innovation within the organisation, even if such influence of external factors is very strong provides the argument in support of the importance of the internal factors as factors of key importance. If the internal transformation processes do not function properly no innovation is created.

Applying the criterion of activity, we can identify two basic groups of innovation strategies:

offensive strategies – mainly of dynamic character that assume four variants, i.e. the cost-price advantage strategy (applied when the company wants to decrease the costs as a result of technological or organisational development), the qualitative advantage

strategy (applied when the company wants to produce luxury goods), the market niche strategy (applied when the company wants to find a market niche) and the differentiation strategy (applied when the company wants to change its range of products through innovative activities),

 defensive strategies – mainly of static character that assume 3 variants, i.e. the survival strategy (applied in crisis situations), the protection strategy (applied in the situation of using external aid) and the bureaucratic strategy (the company has a strategy that it is not implementing formally).

The situation is similar in case the criterion of novelty is applied, in which case we deal with the:

- pioneer strategies being the driving force of economic development, based on so far unknown inventions and all kinds of innovation type solutions in the areas of the applied technologies and organisation.
- imitation strategies of adaptive character that use already established solutions represented mainly by purchase of licenses, patents and implementation of improvement projects.

# 2 METHODOLOGY OF THE SURVEY

The empirical survey aimed at obtaining answers to the following questions:

- which factors are used by the enterprises surveyed to compete in the market;
- do small and medium innovation enterprises undertake planned actions in the area of innovation;
- do they apply, and with which frequency, the strategies in their innovation activities.

The survey was conducted in May 2011 in 24 Polish enterprises from Warmińsko-Mazurskie, Mazowieckie and Pomorskie voivodships. The survey questionnaire containing closed question was the tool applied.

Nonprobability purposive sampling was applied selecting the entities participating in subjective way so that they could be the most useful or representative. The following selection criteria were applied:

- enterprise size enterprises defined according the classification by the GUS (Central Statistical Office) as small and medium employing from 10 to 250 employees were considered;
- innovation of the enterprise the survey was conducted in innovation enterprises that, according to the Oslo<sup>1</sup> methodology, were enterprises that introduced at least one new or significantly improved product and/or one new or significantly improved technological process to the market within the last 3 years;
  - majority capital, which in case of the organisations surveyed was domestic.

According to the Statistical Classification of Economic Activities in the European Community (NACE) the enterprises surveyed belonged to the following sections:

- section C Manufacturing (the survey was conducted in enterprises manufacturing: food products and beverages, furniture and wood products, garments as well as machines and devices) – 10 firm;
- section F (Construction) 6 enterprises;

<sup>&</sup>lt;sup>1</sup> published in the international methodological guidelines called the Oslo Manual, which is commonly accepted as the international methodological standard applied in all the countries conducting statistical research in innovation.

- section H: (Transport and storage),
- section I (Accommodation and food service activities the survey was conducted at hotels),
- section P (Education the survey was conducted at language schools) enterprises.

The majority of the organisations surveyed have been in the market for over 10 years (10 enterprises) or over 20 years (11 enterprises) and 14 of the organisations surveyed view the market in which they operate as mature, 9 as a growing market and one enterprise creates the market.

Almost one third of the enterprises surveyed possess research and development department or unit. Slightly more enterprises declare that the budget for innovation activities representing in the majority of enterprises up to 1% of the enterprise turnover has been established.

# **3 RESULTS**

Small and medium enterprises analysed declared that the quality of products offered was the most important element of competing at the market (fig. 1). Price is highly important in the competitive combat and logistic activities were important in case of construction enterprises. Also in case of the manufacturing enterprises logistic activities are more important as a factor of competition than product and technology innovation. The analysed enterprises attributed the lowest importance to the marketing activities.

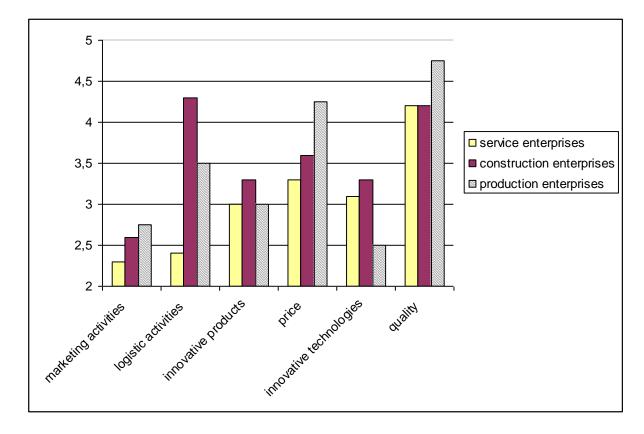


Fig. 1. Degree to which enterprises surveyed compete in the market using different factors (scale: 0-5, where: 0- not at all, 5 -to a very high extent) *Source: own work based on the survey* 

Majority of the enterprises surveyed possess long-term plan of operation encompassing innovation although they declare at the same time that current activities concerning innovations that represent the response to the market needs are also undertaken. Eight of the organisations surveyed, however, treat innovations on current bases only reacting to the current market needs.

Enterprises with strategic orientation on innovations are in continual search for innovation opportunities, which results in the higher probability that they will get involved into innovative activities. As a consequence, they may achieve a higher level of skills in creating novelties and lasting competitive advantage as compared to organisations with strategic quality and cost orientations. As a consequence the answer to the question of whether the enterprises possessing the long-term action plans prepared for the needs of managing innovations placed more stress on innovative products and technologies in the process of competing was important. The survey conducted indicates that possessing a strategic action plan concerning innovations involves stronger perception of the innovative technologies, products and marketing activities as factors of competition in the market (Table 1).

Factors of competition In the	The enterprises, which	The enterprises, which do
market	possess long-term plan of	not possess long-term plan of
	operation encompassing	operation encompassing
	innovation	innovation
quality	4,6*	4,2
innovative technologies	3,4	2,1
price	3,6	3,8
innovative products	3,7	2,0
logistic activities	3,3	2,9
marketing activities	3,1	1,8

Table 1. Degree to which the enterprises surveyed compete in the market employing different factors

\* scale: 0-5, where: 0- not at all, 5 - to a very high extent

#### Source: own work based on the survey

Creating innovations is one of many methods in striving of the organisation for its survival and development and that method can be substituted by other ones. The direction of activities other than implementation of innovations may be appropriate in various situations, e.g. during competition on price, costs or quality. Reduction of costs or the strategy of operational excellence requires systematic improvement of operations in the enterprise without introduction of radical innovations. In that case effectiveness and continuous improvement are the most important while the focus is on improvement of the existing operations (Beaty, Schneider 1997). Organisations with strategic focus on quality and/or costs try to maintain relatively safe market position offering a relatively unchanged product, lower prices, higher quality or better services than the competitors. They use established ideas and methods avoiding high risk. According to Lescovar-Spacapan and Bastic (2007) such organisations are characterised by centralised decision-taking, high level of control, rigid scopes of responsibilities of the employees. Studies conducted by Zduńczyk and Blenkinsopp (2007)aiming at determination of the extent to which companies in Poland support innovation and creativity indicate that enterprises with total or partial foreign capital operating in Poland showed much more propensity for creativity and innovation than companies with entirely Polish capital.

Enterprises analysed implemented the costs reduction strategy in most cases (Table 2). They, in most cases focused on products of one industry, which is characteristic for small and medium enterprises. Acquisitions or mergers with other companies were also highly infrequent. Manufacturing enterprises created innovations on commission from other companies more frequently than others. The majority of organisations surveyed sometimes or frequently applied the strategy of copying or imitating the ideas of competitors and never acted the leaders in innovations. The enterprises surveyed rarely cooperated with the institutions of higher education or research and development units and also rarely purchased licenses. This can be compared with the results of surveys covering the SMEs conducted during the years 2004 and 2006 on the representative sample of one thousand enterprises that also showed clearly that a large proportion of the small and medium enterprises covered did not collaborate with the external partners and those that got involved in such collaboration usually did it with other business partners (Żohnierski 2009).

Innovation activities	production enterprises	construction enterprises	service enterprises
We copy innovations fully	0,4*	0,7	1,3
We copy but we make minor changes in the product	0,8	1,0	1,3 1,3
We copy the idea but we change the characteristics			
significantly aiming at wider application	0,5	1,7	1,3
We look at innovations by others and use them as			
inspiration for creating our own ones	1,3	1,3	1,8
We do not imitate in any way being the innovation		<b>1,3</b> 1,0	<b>1,8</b> 0,3
leader	0,6		
The innovations we create involve high risk but also		0,7	1,3
high profits	0,8		
The innovations we create involve low risk and low			
profits	1,0	1,0	1,0
We reduce costs	2,3	2,0	2,5
We purchase licenses	0,6	0,3	0,3
We create innovations on commission by other		0,3	0
businesses	1,3		
We cooperate with higher education institutions and			
research and development units	0,8	0	0,3
We focus on products of one industry	2,2	2,3	1,5
We avoid competing with the direct competitors	0,8	0,7	0,5
We make changes to the product that substitutes for			
our earlier product	0,9	0,7	1,0
We attract specialists from competitor enterprises	0,4	1,0	1,0
We purchase other businesses through acquisitions			
and mergers	0,2	0	0,3

Table 2.Frequency of innovation activities in the production, construction and service enterprises surveyed

\* evaluation of activities according to the scale: 0- never, 1 – sometimes, 2 – frequently, 3 – always

Source: own work based on the survey

In the survey the influence of the market in which the enterprises operated on the frequency of implementation of the strategy in the area of innovations was also analysed. They results indicate that all the enterprises surveyed the respondents from which declared operation in the growing market always focused on the products of one industry. The majority of enterprises operating in the mature market search for markets attractive for them without the exclusive focus on their current markets. Organisations operating in the growing market much more frequently applied strategies of attracting specialists from competitor enterprises; they were the leaders in the field of innovations more frequently and also less frequently created innovations on commission from other enterprises as compared to the enterprises operating in the mature markets. The perspective of market development then is the motivation for higher expansiveness of enterprises in the field of innovation.

Concentration on products of one industry was declared by all the enterprises possessing the research and development unit (Table 3). Those organisations, declared much more frequently than enterprises possessing no research and development units that they did not imitate the competitors in any was being the leaders in the field of innovations.

Innovation activities	R&D unit exists	absence of R&D
		unit
We copy innovations fully	0,8*	0,6
We copy but we make minor changes in the product	0,4	1,2
We copy the idea but we change the characteristics	0,4	1,1
significantly aiming at wider application		
We look at innovations by others and use them as	1,4	1,42
inspiration for creating our own ones		
We do not imitate in any way being the innovation	1,6	0,2
leader		
The innovations we create involve high risk but also	1,4	0,7
high profits		
The innovations we create involve low risk and low	1,0	1,0
profits		
We reduce costs	2,0	2,42
We purchase licenses	0,2	0,6
We create innovations on commission by other	1,0	0,75
businesses		
We cooperate with higher education institutions and	0,4	0,6
research and development units		
We focus on products of one industry	3,0	1,7
We avoid competing with the direct competitors	0,6	0,75
We make changes to the product that substitutes for	0,8	0,92
our earlier product	,	
We attract specialists from competitor enterprises	0,6	0,67
We purchase other businesses through acquisitions	0	0,25
and mergers	-	-, -
and mergers		

Table 3. Frequency of innovative activities in the enterprises surveyed

\* evaluation of activities in a scale: 0-never, 1-sometimes, 2-often, 3-always

Source: own work based on the survey

# **4** CONCLUSION

In the enterprises analysed creating innovations is not a priority. The enterprises declared competition on quality aiming at the same time at decreasing the costs as their more important goals. It can be suspected that the majority of the organisations implement the strategic orientation focused on the costs and/or quality. The survey conducted indicates that possessing a strategic action plan in the area of innovation is correlated with stronger perception of innovative technologies and products as well as marketing activities as the factors of competition in the market. However, the declaration of possessing a long-term action plan is not the factor sufficient for implementation of the innovation focused strategic orientation. On the base of the survey conducted it can be concluded that the factors motivating entrepreneurs to take more expansive innovation actions include operation in the growing market and concentration on the products of one industry as well as possessing a research and development unit.

## Sources

- 1. BEATY R. W., SCHNEIDER C. E., *New HR roles to impact organizational performance*, "Organizational Dynamics", 1997, 24 (2), s. 36-49.
- 2. JAWORSKI B., A. K KOHLI, *Market Orientation: Review, Refinement and Roadmap*, "Journal of Market Focused Management", 1996, 1(2), s. 119-135
- 3. KICKUL J., WALTERS J., Recognizing New opportunities and innovation. The role of strategigic orientation and proactivity in Internet firms, International Journal of Enterpreneural Bahaviour and Research 8 (6), 2002, s. 292-308
- 4. LESCOVAR-SPACAPAN G., BASTIC M., Differences in organizations' innovation capability in transition economy: Internal aspects of the organizations' strategic orientation, 2007, "Technovation" 27, s. 533-546.
- 5. PALADINO A., Analyzing the Effects of Market and Resource Orientations on Innovative Outcomes in Times of Turbulence, Product Innovation Management 25, 2008, s. 577-592.
- 6. POMYKALSKI A. 2001, Zarządzanie innowacjami, Warszawa Łódź.
- POZNAŃSKA K., Innowacyjność jako czynnik determinujący wzrost konkurencyjności małych i średnich przedsiębiorstw, [w:] Przedsiębiorstwo na przełomie wieków, Materiały konferencyjne, Toruń 2001 ISBN 83-231-1380-7
- 8. ZDUNCZYK, K., BLENKINSOPP J., Do organizational factors support creativity and innovation in Polish firms?, European Journal of Innovation Management 2007, 10 (1), 25-40.
- ŻOŁNIERSKI A., Wykorzystanie technologii informacyjnych i innowacyjność w małych i średnich przedsiębiorstwach w Polsce w świetle badań empirycznych [w:], innowacje małych i średnich przedsiębiorstw w świetle badań empirycznych, (red.) A. Jasiński, Warszawa 2009, s. 154-177, s. 162.

## Contact

Anna Strychalska-Rudzewicz, Ph.D. University of Warmia and Mazury Ul. Oczapowskiego 4/201A, 10-957 Olsztyn, Poland Tel: +48 600302073 email: astry@uwm.edu.pl