

# PROJECT MANAGEMENT IN MICRO AND SMALL ENTERPRISES ON THE EXAMPLE OF PROJECTS UNDERTAKEN BY THE UNIVERSITY OF SZCZECIN

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**Abstract:** The paper presents the University of Szczecin's experiences with micro and small enterprises concerning the implementation of innovative process solutions and pre-implementation research. This form of cooperation took place in 2009-2011 and was part-financed by the Polish Agency for Enterprise Development. The paper describes the phases of the University of Szczecin's experience of cooperation with entrepreneurs, from a beauty contest to negotiations on the contract, delivery of the service and the final settlement. For selected case studies the continuation of the cooperation between enterprises and the scientific institution has been presented as achievement of one of the programme objectives, i.e. the establishment of cooperation between entrepreneurs and scientific institutions.

**Keywords:** innovation, implementation, project management

## 1 Innovation performance and efficiency of Polish micro, small and medium-sized enterprises

The survey carried out in June 2009 by the "Lewiatan" Polish Confederation of Private Employers among the enterprises considered in the "Innovation Tuning Fork 2008" ("Kamerton Innowacyjności 2008") ranking depicted to what extent the investments in innovation had affected the efficiency and competitive performance of those enterprises<sup>1</sup>. The majority of the enterprises in question indicated that their investments in innovation made in 2007-2008 had a positive effect – better competitiveness being the most frequent one. The study shows that following the implementation of innovation, 89% of enterprises improved their competitiveness in terms of quality of their products in the Polish market, whereas 57% reported a similar improvement in foreign markets. Competitiveness in Polish and foreign markets was also analysed from other perspectives: innovation (reporting an increase by 82% and 51%, respectively), the quality of customer service (71% and 39%, respectively), prices (66% and 43%) and promotion and distribution (57% and 37%). Investment in innovation affected also the efficiency of the analysed enterprises: 13 per cent reduced their activity costs, as many as 18 per cent increased their profits, 15 per cent increased their profitability and 11 per cent raised their labour productivity<sup>2</sup>.

According to the Central Statistical Office's data, product and process innovations were introduced in the years 2006-2008 by more than 14.0% of industrial companies and over 12.0% of service providers in the group of small enterprises. In the medium-sized enterprise sector the percentages were even higher, exceeding 32.0% and 25.0%, respectively<sup>3</sup>. Slightly lower percentages of small enterprises invested in organisational innovations and the latest marketing solutions (in the group of industrial companies: 9.0% and 10.9%, respectively, and in the group of service providers: 12.0% and 11.9%, respectively). A similar tendency was observed for medium-sized enterprises – 19.8% of industrial enterprises and 24.1% of service providers invested in that period in organisational innovations, whereas 17.4% of industrial enterprises and 20.0% of service providers invested in innovative marketing solutions.

The above-mentioned survey results reveal the relevance of investment in innovative solutions. It should be noted that an enterprise's position in the market is affected to a large extent by its modern approach to management, which involves in particular constant investment in innovative solutions. As a result, such activities improve economic entities' competitiveness in the market. Innovative solutions may refer to: product quality, innovative technologies, customer service, pricing policy, methods of promotion and distribution or other factors affecting the efficiency of the enterprise's operations.

A study on innovative performance of Polish micro and small enterprises initiated in the 1990s revealed that it was still much worse than in most of the "old" EU member states<sup>4</sup>. One of the factors which were pointed out as the reasons for this condition was the low level of cooperation between industry and research. In order to intensify those relations, the Polish government in collaboration with the Polish Agency for Enterprise Development (PAED) initiated in 2008 a pilot programme known as the "2008-2011 Innovation Voucher". Its major objective is to encourage new relationships between entrepreneurs and scientific institutions. The studies carried out so far by the author as well as his relationships with micro, small and medium-sized enterprises in his consulting practice provide evidence for both poor innovative performance and insignificant relationships between SMEs and scientific institutions. In this context, the PAED's initiative to support the establishment of cooperation between selected enterprises and scientific institutions, in the author's opinion, seems to be both apt and necessary.

### 1.1 Programme beneficiaries

Since the results of the studies mentioned above had clearly revealed major discrepancies within the group of micro, small and medium-sized enterprises, with the latter having a much larger potential both financially and in terms of R&D, it was concluded that the "Innovation Voucher" Programme should be addressed to micro and small enterprises only. Like in the case of numerous other programmes part-financed by the state budget, it is required that those enterprises be based in Poland, whereas natural persons should be additionally Polish residents. In the author's opinion, the introduction of restricted requirements which the applicants need to meet was a right decision. Taking into consideration the eligible costs and the amount of financial support available within the "Innovation Voucher" Programme, both issues discussed below in detail, medium-sized enterprises themselves would have been uninterested in the programme or would have posed too strong competition for micro and small enterprises. Furthermore, medium-sized enterprises generally maintain more intense relationships with research and – as a consequence – in many cases fail to meet the additional condition defined in the guidelines. Namely, in order to emphasise the fact that new relationships need to be built between SMEs and scientific institutions, the Programme Guidelines allow funding to be granted to those entrepreneurs only who in the year of application and within 3 calendar years preceding the year of application for funds within the "Innovation Voucher" Programme have not been using R&D services delivered by a scientific institution in relation to product or technology implementation or development. Table 1 presents three main criteria which should be taken into account when classifying enterprises into three groups<sup>5</sup>.

Table 1. Classification of SMEs

Criterion Category of enterprise	Employment [persons]	Annual turnover [EUR millions]	Annual balance sheet total [EUR millions]
Micro	<10	<2	<2
Small	<50	<10	<10
Medium-sized	<250	<50	<43

The above-mentioned remarks refer to enterprises in the meaning of the Act of 2 July 2004 on Freedom of Economic Activity (published in the official Polish Journal of Laws No. 155 of 2007, item 1095 as amended). These are the basic criteria

<sup>1</sup> <http://www.pkpplewiatan.pl> (2011-12-29).

<sup>2</sup> Starczewska-Krystzioszek M., Innowacje chronią firmy przed skutkami kryzysu, "Rzeczpospolita" 2009, No. 297 p. B10.

<sup>3</sup> <http://www.stat.gov.pl> (2011-12-29)

<sup>4</sup> Jacek Łapiński, Paulina Zadura-Lichota, Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce, Polska Agencja Rozwoju Przedsiębiorczości, Warszawa 2011, s. 45.

<sup>5</sup> Commission Regulation (EC) No. 800/2008 of 6 August 2008

whereas for the purpose of the appropriate classification an assumption needs to be made that a micro- or small entrepreneur be understood as a micro- or small entrepreneur meeting the conditions set in Annex I of the Commission Regulation (EC) No. 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation) (Official Journal of the European Union L 214 of 9 August 2008).

### 1.2 The amount of funding and eligible costs

The “Innovation Voucher” Programme allows a one-off funding of maximum PLN 15,000 for one enterprise over the years 2008-2011<sup>6</sup>. The list of eligible costs is limited and includes the purchase of services related to product or technology implementation or development, aimed at the development of new or enhancement of the existing technologies sold or products manufactured by the enterprise. The “Innovation Voucher” Programme was implemented in 2008 and ends in 2011. Its total budget for those three years was originally estimated for up to PLN 30 million. The total amount of funding and the number of applications recommended for funding by the PAED by years are presented in Table 2.

Table 2. Programme data for the years 2008-2011

Year	Number of applications recommended for funding	Total value of applications recommended for funding [PLN]
2008	24	360 000,00
2009	511	7 576 343,84
2010	463	6 933 387,64
2011	584	8 774 200,00

In most of the cases (1,539 out of 1,604 applications recommended for funding), scientific institutions estimated the value of the services they provided for enterprises at the maximum amount of eligible costs. It follows that in the majority of cases the financial support received was used with maximum efficiency. Other cases suggest that the financial support received helped the beneficiary to perform major implementations; the net value of the biggest one was estimated at PLN 69,995. The facts that only slightly more than a half of the budget in the years 2008-2011 was used and not a single application was recommended for funding in 2008 point to certain imperfections of the activities promoting the programme on the one hand, and on the other they reveal that the enterprises were not ready to apply for such resources. It is still more disturbing that the PAED as an implementing authority simplified the application procedures as much as possible.

### 1.3 Guidelines and procedures for applicants

The “Innovation Voucher” Programme is carried out on an annual basis and the PAED considers applications continuously until the total budget for a given year has been exhausted. The dates related to individual calls for applications are published on the PAED’s website. The Applicant (the entrepreneur) selects a scientific institution – the Provider of the service related to product or technology implementation or development. Next, the Applicant prepares the application for funding according to the Programme Guidelines. The application form needs to be signed by authorised representative(s) of the Applicant. Several basic documents need to be attached (an extract or complete copy of the relevant (commercial) register records, a special form concerning application for de minimis aid, financial reports for the last three years compatible with the current accounting regulations should the Applicant be legally obliged to prepare them, information about de minimis aid should the Applicant have benefited from it in the current calendar year or in the last two calendar years). The enterprise fills in the application form, signs it, certifies the attachments to be true copies of the originals and checks whether all the necessary documents have been attached. Next, the application form with attachments is submitted to the PAED in one original and two photocopies certified by the Applicant to be true copies of the original. The

Agency considers the applications for funding on a continuous basis in the order of their submission. For each of the three years of the programme separate deadlines are set. Following the approval, the PAED submits two copies of the agreement to the Applicant. The Applicant signs the agreement and submits both copies back to the PAED within 14 days since the day the agreement has been delivered. The service related to product or technology implementation or development may be provided (by the scientific institution) to the Beneficiary (entrepreneur) after the application form has been submitted and recommended for funding. The service Provider issues an invoice for the actual value of the service delivered to the Beneficiary, and the entrepreneur pays the ineligible costs to the Provider’s account. Next, the Beneficiary submits to the PAED all the documents essential to confirm the actual delivery of the service (payment request, service delivery report, copies of invoices and other documents confirming the payment of ineligible costs – all certified to be true copies of the originals). After the documents have been verified and accepted, the Agency transfers the payment within 30 days to the service Provider’s account. If any irregularities should be observed in the enterprise’s activities (errors in documents, failing to meet the timeline) it is held responsible for settling any amounts due to the service Provider. Even though the procedures were simplified as much as possible, they still have not been met in all the applications. As a result, in the years 2008-2009, 2010 and 2011, respectively, 73, 201 and 542 applications were rejected.

## 2 Cooperation between R&D and business

### 2.1 Scientific institutions – implementers

According to the rules of the “Innovation Voucher” Programme, its idea is to promote the cooperation between micro/small enterprises and scientific institutions in order to enable the exchange of knowledge concerning broad innovative solutions for companies. A scientific institution is defined in Art. 2.9a-f of the Act of 8 October 2004 on the Principles of Financing Science (published in the official Polish Journal of Laws No. 169 of 2008, item 1049) and in this meaning it needs to be based in Poland. Such an institution which provides a service to the beneficiary, where this service is related to product or technology implementation or development and is financed within the “Innovation Voucher” Programme, needs to be identified in the application form. Scientific institutions from the whole country may participate in the programme regardless of the region in which they are based – the beneficiary is free to choose a service provider from another region, there are no restrictions. This choice should be based on the institution’s research potential and its technical capabilities on the one hand, and on the other it should assure good value for money. The entrepreneur is obliged to make this choice, order the service having chosen the best offer and make every effort to avoid potential conflict of interest so that the functions of each party are carried out without any bias or subjectivity. All those activities as a rule should be performed in writing, yet electronic mail and fax are allowed for activities other than the conclusion of the agreement. Given the fact that the majority of scientific institutions maintain vertical decision making structures, it is smaller institutions that became more competitive in their offers submitted in response to the requests for quotations concerning the delivery of the implementation service required.

### 2.2 University of Szczecin on the map of Polish scientific institutions

The University of Szczecin (US) has a very good location on the map of implementations within the “Innovation Voucher” Programme in Zachodniopomorskie and Lubuskie Voivodships (referring to the enterprise’s registered office), and has made a certain appearance in Pomorskie, Wielkopolskie, Kujawsko-Pomorskie Voivodship. The University’s shares in the implementations made in Poland and in selected voivodships in the years 2008-2011 are shown in Table 3.

<sup>6</sup> “Innovation Voucher” pilot programme – guidelines for applicants, Warsaw: PAED 2008-2011

Table 3. The share of the University of Szczecin in the implementations made in the years 2008-2011 by the location of the enterprise's (Beneficiary in the "Innovation Voucher" Programme) registered office

Region	US's share		
	2008-2009	2010	2011
Kujawsko-Pomorskie	0.00 %	0.00 %	12.5%
Lubuskie Voivodship	0.00 %	25.00 %	8.33%
Pomorskie Voivodship	0.00 %	6.67 %	15.38%
Wielkopolskie	0.00 %	0.00 %	3.13%
Zachodniopomorskie Voivodship	29.17 %	34.38 %	28.21%
Poland	1.37 %	2.55 %	3.13%

The results for both Zachodniopomorskie and Lubuskie Voivodships point to the University of Szczecin as a leading scientific institution implementing innovative solutions in enterprises based in those regions. It is also noteworthy to observe that the share of the University of Szczecin in the implementations in 2010 increased as compared to the years 2008-2009 for both Zachodniopomorskie Voivodship and Poland. Another reason for high evaluations of the University of Szczecin is its presence on implementation markets in Kujawsko-Pomorskie, Lubuskie, Pomorskie and Wielkopolskie Voivodships.

### 2.3 Strengths and weaknesses of the "Innovation Voucher" Programme – evaluation based on selected implementations

All those aspects, along with a huge interest in the programme among entrepreneurs across the country, seem to indicate that the programme's idea to initiate relationships between entrepreneurs and science has proved to be very apt. The strengths of the "Innovation Voucher" Programme include: transparent and simplified procedures for applicants, a wide variety of services eligible for funding, a large number of potential service providers/scientific institutions, exclusion of medium-sized enterprises from potential SME beneficiaries, efficient "customer" service offered to beneficiaries by the PAED. In addition to all its strengths, the programme has also several weaknesses, including: poor promotion of the programme, low level of funding, changes in the documents within the call for projects. Against the strengths, however, the programme's weaknesses are only minor drawbacks which – in the author's opinion – do not affect significantly the general high evaluation this initiative definitely deserves.

### 2.4 Summary: real and potential benefits of the relationships established between SMEs and R&D

The benefits which resulted from the relationships established between entrepreneurs and the University of Szczecin were mutual. The companies were able to acquire knowledge about the most recent academic solutions applicable to business, while the academics were able to confront real problems of entrepreneurship and learn business rules used in practice. The implementations carried out in 2009 and 2010 indicate that in the majority of cases the relationships established were not incidental. Many beneficiaries of the "Innovation Voucher" Programme are still contacting the University of Szczecin, their former deliverer of implementations, for assistance in more or less complicated business problems. In many cases it has led to new contracts between the scientific institution and the enterprise. Those real benefits allow a positive outlook for the future: many other business problems may be solved by the human resources readily available at scientific institutions without the need to educate or employ new staff in the enterprise itself (outsourcing). Next, the companies as representatives of the business world may participate in panel discussions and conferences. And finally, researchers have an opportunity test their theories in real life – i.e. on micro and small enterprises.

### Literature:

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Primary Paper Section: A

Secondary Paper Section: AE, AH