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**EXAMPLES OF GOOD MARKETING PRACTICES IN RESEARCH
AND SCIENTIFIC INSTITUTES IN POLAND****Key words**

Marketing, promotion, public research organisations, good practices.

Abstract

The insufficient R&D expenditure in Poland and the difficult conditions for the commercialisation of research results force public research organisations to search for effective marketing tactics that would support the transfer of innovations. Based on the methods of case study and the comparative analysis of several Polish public research organisations, the authors attempt to indicate good practices in this field.

1. Introduction

The insufficient R&D expenditure (0.76% PKB with OECD average 2.40% and EU average 2.04% in 2012, however rising to 0.9% PKB in 2013) [30], and the difficult environment for R&D activity and scarce cooperation between the science and business sectors (only 37% participation of entrepreneurs in scientific research in 2013 compared to 67% OECD average [30, 31 pp. 24–31] result in Polish SMEs being neither innovative, nor competitive. The rank of

Poland in international innovativity rankings is rather poor: 24th among 27 EU countries [32], 29th among 34 OECD countries [33], and 54th among 144 countries worldwide [34].

Concurrently, a model separating the industry from the research organisations prevails, which means that neither of the sectors are even willing to start any form of cooperation. As a result, a worrying 56% of Polish entrepreneurs are of the opinion that there is no need for the business to form closer ties with the R&D sector [1, pp. 7].

New post-industrial knowledge-based economies are driven by science and R&D activity, and the ability to transfer information, knowledge and its results is needed to add value; therefore, the R&D activity needs to be effectively promoted. The marketing of science and innovations should compensate the imperfections in the transfer of innovations to practical applications, which is their commercialisation. Therefore, the marketing of public research organisations is a social and management process consisting in the development, promotion, exchange, and implementation of innovative solutions in practical applications, and this is a process which responds to the needs of people and institutions by rationalizing their actions aimed at increasing the competitiveness of companies and, consequently, the quality of their life [2, pp. 206]. The role of marketing in this field is particularly significant due to the fact that the most frequent barrier to commercialisation is the lack of sufficient knowledge on how innovations should actually be promoted [24, pp. 55].

2. State of the art

The significance of the topic is backed by numerous scientific publications and guidebooks that have recently come out in form of conference materials [11, 12], or have been published by the Ministry of Science and Higher Education [1, 4, 22], public administration institutions [9], universities [13, 24] or independent institutions and foundations [3, 5, 6, 10, 14, 18].

In the modern economy, marketing should integrate individual entities [19, pp. 18]. In this context, marketing activity should focus on stimulating the development of innovative products that can be practically applied in industry, creating the demand in enterprises, and then commercialising and implementing innovations in industrial practice [2]. Commercialisation is not an independent activity, and its effectiveness depends on successful marketing [9, pp. 29].

The importance of marketing in the commercialisation of research results is outlined, starting from the indication of the barriers existing between the scientific and business communities [1, 10, 18, pp. 45–48, 19, pp. 21–22]. These mainly include such issues as the complete lack of marketing activities, the insufficient flow of information, the lack of initiatives in identifying fields of cooperation, the lack of understanding, the lack of competent intermediaries,

the discouraging regulations, the lack of a uniform system of collecting knowledge about the research conducted in the R&D units, and the inefficient funding mechanisms.

In the publications analysed, research results are characterised as an object of commercialisation processes [9]. Particularly well presented and systemised are the problems of commercialisation methods and paths [9, 5, 8, 18].

There are also efforts to create a set of marketing tools to assist in the transfer of research results into economic practice [4], i.e. effective presentations, the development of the concept of promotional activities (objectives, target groups, communication tools), and contacts with the media. This publication also quotes several Polish and foreign examples of how science is actually promoted. Promotional tools used in this area include, in particular, individually printed materials (reports, publications, posters, newsletters), and the Internet (Web sites, emails, newsletters) [4, pp. 28–29, 19, pp. 23]. As for communication with the surrounding area, the use of on-line databases of technologies and technology platforms is suggested [19, pp. 22–23], and the establishment of long-term and mutually beneficial personal relationships with stakeholders is postulated [20, pp. 17–21, 24, pp. 124, 17, pp. 276–301]. Additionally, the role of science dissemination activities is heavily accented [4, pp. 13]. Moreover, the authors draw attention to the specificity of the recipients of promotional activities in the field of new technologies, where the traditional division of the market into sectors can be blurred. Concurrently, the kind of marketing tools applied should depend on the stage of the commercialisation process [24, pp. 121–126].

Good practices in the field of science-business links include the establishment of the regulations supporting cooperation between R&D organisations and enterprises, and facilitating the protection and control over intellectual property, as well as promoting incentives for researchers [18, pp. 41–44].

There also are attempts to create strategies for the development and promotion of the R&D system, implemented through the analysis of strengths, weaknesses, opportunities, and threats, and aimed at the creation of the vision and application of actions stimulating the development of this system [14].

As far as the case study analysis is concerned, this method is a rather popular research method. With its use, particularly interesting examples of good practices in the promotion of science by selected foreign and Polish institutions are indicated [4, pp. 53–70]. A selection of issues concerning the commercialisation of research results at innovative companies, research institutes, and universities are also presented in other sources [9, pp. 169–188]. The literature on this topic is also full of examples of market-oriented projects concerning the commercialisation of research results, and the creation and promotion of entrepreneurial behaviours [6, pp. 39–45]. A case study method was also used for the analysis of examples of co-operation between the science

and business sectors [21] in which the methods of patronage and sponsorship, basic collaboration, access, close relationship, multilateral cooperation, dissemination of results, and promotional services are stressed. A further analysis of science-business links is presented, e.g. in [18, pp. 49–70], where, based on the results of the research conducted and the examples of academic entrepreneurship [23], cases of companies that have built their value due to close cooperation with research centres are presented.

Summarising, although the literature on the topical matter is fairly extensive, no examples of good practices and marketing tools to be applied by a research organisation have been found. This gap has encouraged the authors to undertake study in this area.

3. Research methodology

A case study method and comparative analysis were used for the purpose of this article. An open questionnaire (request for information) was sent in order to obtain information on what marketing practices are used by research institutes.

The materials presented in the article constitute an original set of data received from questionnaires that were sent back by the research institutes. The questionnaires were sent to email addresses taken from the on-line database available on the website of the Central Council of Research Institutes (www.rgjbr.org.pl). Five of the institutes surveyed responded. The fifth case was developed in-house. The study was conducted between June-July 2013.

4. Analysis of selected case studies

Institutes analysed include the following:

- Motor Transport Institute (ITS), which executes, coordinates and promotes research and implementation research activities in the field of road transport;
- PIMOT – Automotive Industry Institute, which conducts scientific and R&D activity related to the automotive industry, mainly automotive technology, and the generation and use of energy from renewable sources and fuels;
- Institute of Welding (IS), whose activity covers the complex issues in the field of welding, including brazing and thermal cutting of metals and plastics;
- COBRO-PIB – Packaging Research Institute, which conducts comprehensive examinations and tests of packaging and packaging materials, as well as machines and equipment used in the packaging industry; and,
- Central Institute for Labour Protection (CIOP – PIB) – an organisation dealing with complex issues of work conditions according to human psychophysical capabilities.

Among the analysed cases, the most commonly used promotional tools are conferences, seminars, and meetings of a scientific nature held together or with the participation of business partners. Training courses are also popular, which include specialised courses or workshops focused on applied skills and knowledge. An important role is also played by social education, including educational picnics to promote safe behaviour in the workplace (CIOP-PIB), campaigns to promote proper driving behaviour and environmentally friendly attitudes (PIMOT), organizing actions to promote public awareness of important issues and their possible solutions (ITS – educational package “Driver 50+”, which is to provide this age group with the longest possible mobility without creating any road threats).

A very popular marketing tool is the participation in fairs and exhibitions, usually several times a year. Interestingly, although not very frequently used, forms of marketing include the honorary patronage of events (PIMOT, IS) and the organization of contests, as in the case of COBRO-PIB (PakStar – National Packaging Competition and Student Packaging Design Competition PakStar) and CIOP-PIB (art competitions for children, unique poster competition for visual artists concerning work safety).

In the analysed cases, the rarely used tools include the participation in clusters and consortia, advertising in the media, and keeping a CRM database of stakeholders. Out of the 6 case studies, advertising in the press and publications are used only by IS and COBRO-PIB, while IS is also in possession of a formalised system of visual identification (corporate identity).

All the institutions studied use printed materials and publications as their main marketing tool. These particularly have the form of newsletters and journals (ITS – “Road Safety,” PIMOT – “Archive of Automotive Industry,” IS – “Bulletin of the Institute of Welding,” COBRO-PIB – “Packaging Spectrum” scientific series appearing in the “Packaging” journal issued once a month, CIOP-PIB – a monthly journal – “Work Safety – Theory and Practice,” the “International Journal of Occupational Safety and Ergonomics Quarterly” and the “Principles and Methods of Work Environment Assessment”) . All institutes under investigation also publish thematic scientific monographs and issue typical promotional materials, e.g. brochures or leaflets.

All the institutes analysed have their own websites, i.e. ITS – www.its.waw.pl, PIMOT – www.pimot.eu, IS – www.is.gliwice.pl, COBRO-PIB – www.cobro.org.pl, CIOP-PIB – www.ciop.pl, which contain basic information about the institutes, the news, scientific and commercial offers, and materials and files to be downloaded. The on-line newsletter can be ordered only in the case of IS and COBRO-PIB. The IS can also be added to favourites on Facebook.

As a summary, Table 1 provides a comparative analysis of marketing activities undertaken by the institutions surveyed.

Table 1. Promotional activities undertaken at research institutes

Activities		ITS	PIMOT	IS	COBRO-PIB	CIOP-PIB
Conferences		X	X	X	X	X
Seminars		X	X	X	X	X
Workshops		X	–	X	X	X
Contests		–	–	–	X	X
Fairs, exhibitions		–	X	X	X	X
Social education		X	X	X	–	X
Honorary event patronage		–	X	X	–	–
Participation in clusters, consortia		–	X	–	–	–
Uploading data in technology databases		–	–	X	–	–
Advertising in the media		–	–	X	X	–
Keeping a CRM database of stakeholders		–	–	X	–	–
Formalised system of visual identification		–	–	X	–	–
Collaboration with industry portals		–	–	X	–	–
Printing activity	leaflets	X	X	X	X	X
	Monographs, guidebooks	X	X	X	X	X
	Journals	X	X	X	X	X
WWW	Basic information	X	X	X	X	X
	News	X	X	X	X	X
	Promotion of own commercial activity	X	X	X	X	X
	Materials for the media	X	X	X	X	X
	Files to be downloaded	X	X	X	X	X
	Newsletter	–	–	X	X	–
	Add tot favourites – Facebook	X	–	–	–	–

Source: Authors.

Professional reliability calls for noticing that certain activities are not mentioned because they were not considered by the institutions as marketing activities, which should not necessary be considered a deficiency. It should also be noted that none of the institutions provided personal contacts or the maintenance of business links as an important tool to create relationships with stakeholders – perhaps due to the informal nature of these “tools.”

5. Good practices in the field of marketing activities undertaken within the technology platform of cooperation between ITeE – PIB and the business sector

The aforementioned examples of good practices and marketing tools used by research institutes indicate that the changes in the global market and the emphasis on the commercialization of R&D results enhance competitiveness and

stimulate the implementation of marketing methods in the management of the activities of these entities. Public research organisations undertake tasks that help them sustain their market position, support their effective running, stimulate the establishment of strong links with customers and end users, and consequently determine their commercial success.

In order to enhance its marketing efforts, the Institute for Sustainable Technologies – National Research Institute in Radom initiated the creation of a model of technological platform (Platform) (Fig. 1) for the dissemination of the results of R&D activity undertaken at the Institute in the fields of advanced materials technologies, modern mechatronic, information and control systems, technical and environmental safety support systems, and test and research apparatus [25, pp. 55–71]. The platform constitutes one of the elements of a complex system for the commercialisation of innovations [14, pp. 5–18]. The product and process innovations disseminated by means of the Platform are the results of the currently executed Strategic Programme entitled “Innovative Systems of Technical Support for Sustainable Development of Economy” [15, pp. 111–122], as well as other R&D projects.

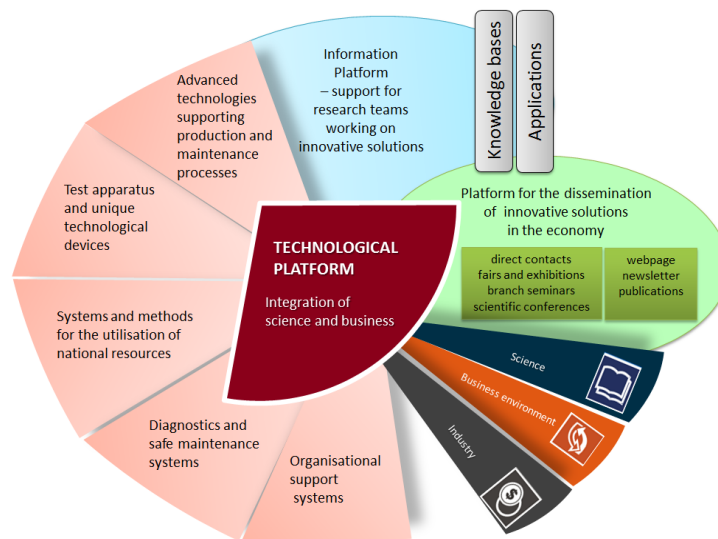


Fig. 1. Structure of the technological platform
Source: Authors

The platform is addressed to entrepreneurs, intermediary organisations, and research institutions. The platform has a formal structure, and dozens of businesses have confirmed their participation. Business entities account for nearly $\frac{3}{4}$ of all the members of the Platform.

The main objective and the planned effect of marketing activities undertaken within the Platform is the establishment of links between companies, researchers, and experts who operate within the research area of technical support for the sustainable development of economy.

Operational activities of the platforms can be divided into the following three categories: horizontal activities, promotional activities, and individual marketing activities.

Horizontal activities include promoting the brand/trade name of the Institute at national and international industrial fairs, trade shows, technical exhibitions, or regional events such as scientific picnics.

Promotional activities within the Platform in question include, on the other hand, activities that enable the dissemination of final products or services in a clearly defined group of buyers, and help to achieve and maintain a competitive advantage by offering ways to solve practical problems (effectively meeting customer needs and demands).

Information on research results and the developed innovative products are disseminated by means of the following web pages:

- Strategic Programme [27],
- Institute [28],
- Partners (enterprises, R&D organisations, universities, intermediary organisations),
- Technological portals and innovation promoting domains [29].

An electronic newsletter constitutes an additional source of information about the R&D activity of the Institute and its results.

Traditional means of information dissemination including publications in periodicals, press releases, or informational and promotional materials also play an important role as far as the marketing activities of the Institute are concerned.

The third category – individual marketing – is based on the establishment of bilateral relations, involving the continuous communication and flow of information on innovations, special offers, and collaboration opportunities between customers and the Institute. On the other hand, information about the needs of customers for particular products, their shopping preferences, and the quality of services provided by the Institute is collected.

Direct marketing is based on the aggregated data set containing information about customers. Work on the creation of a CRM-based database has been initiated. The database is planned to include the following: collected and processed data on institutions, companies, and other entities interested in the cooperation with the Institute.

Due to the specificity of the activity of the Institute, it is not only important to get new clients, but it is equally important to maintain good contacts with existing customers. Therefore, proactive marketing activities are undertaken.

These concentrate on the following issues:

- Maintaining close links with the clients, and
- Systematically offering new products and services.

The implementation of marketing activities determines the organisation of industry seminars (held twice a year), which promote the Institute's R&D results and strengthen cooperation with business partners.

There have been 5 such seminars organized so far, over 120 entities participated in them, and 80% were enterprises.

The seminars organised within the Platform resulted in the organisation of direct individual meetings with business representatives. Several dozens of such meetings between the entrepreneurs and the heads of the Institute's research departments were held in the last 12 months. The meetings aimed at bringing the business people closer to innovations and learning more about application capabilities for the developed solutions. The meetings also formed the basis for talks on the possibility to cooperate in the execution of joint R&D projects.

The effectiveness of meetings and seminars organised within the Platform is confirmed by the fact that only 10% of the entrepreneurs did not find a common field of interest with the Institute, which means that technologies developed at the Institute are commercially attractive and respond to the actual market needs. As a result, there are 20 R&D projects executed by the Institute in close cooperation with business partners, and 10 more such initiatives are planned.

During the aforementioned meetings organised in the framework of the Platform, information about R&D programmes providing support for innovative projects contributing to the increased competitiveness of individual companies and the entire Polish economy were also presented.

The existence of the Platform has indirectly contributed to extending the Institute's field of activity with publishing expert reports and opinions on innovation. Only in the last six months, there were twice as many such documents generated than in the entire previous year. This shows that the brand of the Institute is strengthened and its prestige encourages more enterprises to cooperate with the Institute.

Marketing activities of the ITeE – PIB conducted within the technology platform contribute to the transfer of technologies to business practice and create the pro-market image of the Institute.

6. Conclusions

To sum up, the comparative analyses conducted show that the institutions surveyed most frequently use the following marketing tools:

- Typical PR tools, such as participation or organization of conferences or seminars;

- Printed materials, e.g. brochures, leaflets;
- Scientific publications (journals, monographs); and,
- Web pages with a specified commercial offer.

Areas in which research institutes should undertake marketing activities are as follows:

- Networking in clusters, consortia, and platforms;
- The management of relationships with stakeholders using CRM systems;
- The creation and dissemination of visual identification systems; and,
- The use of Web 2.0 tools.

The Technology Platform at the Institute for Sustainable Technologies – National Research Institute acts as a bridge between science and entrepreneurs interested in implementing innovations. The Platform enables the promotion of R&D activity, the distribution of knowledge (using the website and direct contacts), and the joint application for funds from government and European programmes devoted to the practical implementation of new technologies supporting the sustainable growth of the Polish economy.

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Przykłady dobrych praktyk w marketingu instytucji badawczych i naukowych w Polsce

Słowa kluczowe

Marketing, promocja, instytucje badawcze i naukowe, dobre praktyki, platforma technologiczna.

Streszczenie

Niewielkie nakłady na badania i rozwój w Polsce oraz trudne warunki komercjalizacji rezultatów prac badawczych powodują, że instytucje badawcze i naukowe są zmuszone poszukiwać skutecznych działań marketingowych. Specyfika ich działalności wymusza specjalne zdefiniowanie działalności marketingowej, skoncentrowanej głównie w sferze *public relations* (PR). W artykule, stosując metodę studium przypadku oraz analizę porównawczą dla wybranych instytucji badawczych, starano się zebrać dobre praktyki w tym zakresie.