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MARKETING BASED ON KNOWLEDGE AS A BASIS FOR STRATEGY OF RESEARCH INSTITUTION—ON THE EXAMPLE OF THE PACKAGING RESEARCH INSTITUTE
MARKETING BASED ON KNOWLEDGE AS A BASIS FOR STRATEGY OF RESEARCH INSTITUTION — ON THE EXAMPLE OF THE PACKAGING RESEARCH INSTITUTE

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Abstract

Basis for marketing activities of COBRO — Packaging Research Institute are two main issues. First of all, as a small research and development centre, COBRO has no funds to carry out specialized marketing department. On the other hand, due to huge growth of packaging market, all needs of stakeholders — companies but also other research institutions seeking consortium members — cannot be entirely identified or forecasted, and practical solutions are created in the course of cooperation. For all that reasons Institute has developed its own concept of the knowledge-based marketing, which means more flexible use of the potential of academics and research employees.

Keywords: knowledge, strategy, marketing, research institute, COBRO
Introduction

Marketing literature abounds in theories of knowledge-based marketing as a vehicle for an organization’s growth. For example Wojciech Pizło\(^1\) has drawn on three marketing approaches of:

- relationship marketing (marketing based on the bond between the organization and the consumer);
- social marketing (using an organization’s knowledge of social processes and undertaking socially and environmentally responsible actions);
- online-marketing (based on the electronic flow of information) to come up with the concept of knowledge-based marketing defined as using an organization’s knowledge about markets and distribution channels in order to identify market segments on which the organization should focus its activities (Picture 1).

![Knowledge-based marketing as a vehicle for an organization’s growth](source: [6].)

In stark contrast to the promotion of science,\(^2\) a problem widely discussed and analysed from every possible standpoint, embracing activities such as press conferences, publications in scientific journals, advertising of the higher education offer,

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\(^1\) Pizło W. *Marketing oparty na wiedzy — próba identyfikacji*, Zeszyty Naukowe Polityki Europejskie, Finanse i Marketing No. 3 (52) 2010.

as well as to the marketing of services provided by commercial companies and the so-called third sector\(^3\) of non-profit organizations, analysed, among others, by Marion Burk Wood\(^4\), — issues related to marketing of research and science organizations have not been studied sufficiently well yet, despite the fact that activities of these organizations are tightly connected with the development of relevant fields of science.

In the majority of cases, including the Packaging Research Institute, state-owned research centres in Poland do not have funds to run separate marketing departments while the types of services they offer are directed to clearly-defined users. With only a limited number of research projects contracted, it is hardly possible for state-owned research centres to use standard marketing tools and techniques. In view of this fact, the COBRO has developed a marketing strategy which draws on its experience and takes account of the factors constraining operations of a state-owned research institution.

The Activity of the COBRO — Research Packaging Institute

The COBRO's fundamental objective is to carry out research and development work in the areas related to the life cycle of packagings, to adapt research outcomes to market requirements and to implement research outcomes into industry and business practice. Besides conducting scientific work through delivering its statutory objectives and research projects, the Institute also satisfies R&D, innovation and education and information needs of organizations specializing in design, production, distribution and use of packaging materials and packaging, as well as other stakeholders including public administration and local authorities.

Due to the changing role of packaging and its growing significance in managing an organization — from the marketing perspective in particular — and also because of increasingly strict legal regulations (e.g. the current issue of recycling multimaterial packaging), the number of those interested in both general knowledge about the packaging industry, and delivery of specific projects is rising quickly. In the modern understanding of the term, packaging becomes more of a concept than a real product. In a way, packaging embraces the entire brand strategy, so it should be viewed holistically, at each stage of its functioning.

Due to the changing dynamics of the packaging market, the needs of stakeholders — enterprises but also other research institutions seeking a consortium partner — cannot be precisely identified or predicted while practical solutions are often developed during the course of co-operation. Apart from flexibility, this approach first and foremost requires broad theoretical and practical knowledge, which can only be provided by practitioners involved in the main-stream research, and not by marketers or PR specialists. As Al and Laura Ries aptly put it in their influential book, War in The Boardroom, highly-specialised marketers prefer a narrow range of products. In contrast, the world of science should recognise the value of an interdisciplinary approach in striving to discover the nature of the phenomena observed, also when it comes to the promotion of commercial activities, especially in the present days of McLuhan's global village.

Inspired by Tony Curtis’s *Marketing for Engineers, Scientists and Technologists*, one of very few marketing guidebooks written for representatives of technical sciences, the strategy developed at the COBRO takes into account the fact that technical specialists must have both the knowledge of their field and the knowledge about customers and markets of the organization they are employed in as commercial success depends on the ability to think about technology in marketing terms.

The directions of the Institute's activity are set out in the Strategic Plan for the years 2008–2013. The document delineates the following six priorities — the key activity areas:

- to protect human life and health;
- to protect natural environment;
- to guarantee safe transport of goods;
- to develop innovative materials, packagings and packaging systems;
- to forecast trends in production and use of materials, packagings and packaging systems;
- to carry out training, certification and information activity.

**Concept for the marketing strategy**

The first stage in the development of the concept for the marketing strategy was to systematize the market offer and, as the next step, to define the manner in which marketing

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tasks should be delivered. Picture 2 shows different types of core services offered by the COBRO to a relatively wide range of users.

A starting point for defining specific ways to perform marketing tasks was an in-depth analysis of the external and internal conditions determining the Institute’s activity. According to Marketing Strategies\(^8\), one of the most important publications dedicated to the issue, information should form the foundation upon which a marketing strategy is built.

The next step in creating a strategy supporting the sales of services offered by the Institute, referred to as knowledge-based marketing, was to conduct a SWOT analysis to identify the strengths, weaknesses, opportunities and threats involved in the Institute’s operations as well as to systematize all other relevant data. This led to the identification of the three aggregate pillars of the marketing strategy:

- specialist knowledge,
- opportunities for R&D work, relevant experience and the specific know-how unavailable to other organizations,
- human capital, presented in Picture 3.

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The analysis of the current situation and future trends on the packaging market, as well as the analysis of the Institute's potential permitted formulating the goals of knowledge-based marketing and allowed for defining activities creating the basis for the attainment of these goals. In general, the marketing goals the following areas:

- widening the group of stakeholders;
- enhancing the Institute's prestige;
- fostering flexibility.

The formulation of the above goals was guided by the classic Drucker\(^9\) concept which holds that marketing isn't about selling but about creating a group of customers or, in broader terms, people interested in the service offered. The latter idea seemed to be of special relevance in view of the Institute's statutory objectives and specific ethical requirements concerning the world of science. The bases and goals of knowledge-based marketing are presented in Table 1.

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Table 1. The bases of knowledge-based marketing

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<thead>
<tr>
<th>Ip.</th>
<th>Bases</th>
<th>Goals</th>
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<tbody>
<tr>
<td>1.</td>
<td>Creating the Institute’s image as an expert</td>
<td>Strengthening the Institute’s position on the research services market</td>
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<tr>
<td>2.</td>
<td>Keeping abreast with the developments on the market, including through co-operation with other organizations in the industry</td>
<td>Customer acquisition</td>
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<td>3.</td>
<td>Project-oriented marketing</td>
<td>Flexibility, interdisciplinarity: the involvement of competent employees of particular laboratories and departments</td>
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<td>4.</td>
<td>Marketing of services is a responsibility of specialists working at the labs and departments that offer these services</td>
<td>Optimal adjustment to customer needs and advisory services building lasting customer relationships</td>
</tr>
<tr>
<td>5.</td>
<td>Building knowledge about obligatory and optional activities that must/should be supported by the COBRO’ operations, in place of simple promotion of services</td>
<td>Customer acquisition</td>
</tr>
<tr>
<td>6.</td>
<td>Providing valid non-commercial information about market segments</td>
<td>Enhancing the Institute’s prestige</td>
</tr>
<tr>
<td>7.</td>
<td>Investing in knowledge in the key research areas and supporting employees in raising their qualifications and planning career development</td>
<td>Building competitive advantage</td>
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<tr>
<td>8.</td>
<td>Research projects should be conducted in a manner understandable to commercial market and fitting in with its requirements, without compromising research quality standards; practical knowledge of the market should be regarded as an element of the overall R&amp;D knowledge</td>
<td>Reaching out to a wider group of users</td>
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Source: Authors’ own research.

Selected components of the strategy include:

- Dissemination of research outcomes through spreading scientific-technical information, organizing seminars (including in co-operation with foreign centres, for example the seminar related to the project EcoPaperLoop conducted in conjunction with representatives of technology institutes in Germany), conferences and customer-tailored training courses for enterprises (responsibility for particular components lies with the most experienced employees having specialist knowledge in a given area, regardless of their affiliations);

- Development of knowledge in the areas related to the Institute’s activities through the following:
  - realisation of the statutory research work;
• research projects financed by the National Science Centre (e.g. A Mechatronic System for Investigating the Effects of Renewable Materials on The Strength Properties of Packaging Materials); research projects financed by the National Centre for Research and Development conducted in conjunction with leading research institutions and enterprises (e.g. Modification and Functionalisation of Biopolymer Materials for The Purposes of Developing New Generation Biomaterials — Applied Research Programme, innovative biodegradable packaging systems designed for food contact BIOTREM NOVUM made from renewable materials and the production technology — Programme Demonstrator+);

• Programme CORNET — international projects conducted in conjunction with leading foreign science institutes and enterprises (e.g. Sorption Layers for Paperbased Packaging Materials, Polylactic Acid (PLA) for New Biobased Packaging);

• Participation in the international programme COST Impact Of Renewable Materials in Packaging for Sustainability-Development of Renewable Fibre and Bio-Base Materials for New Packaging Applications;

• Participation in socially important international promotional projects to support sustainable development as part of the Central Europe Programme (aimed at improving innovation, accessibility and the environment and to enhance the competitiveness and attractiveness of the cities and regions\(^{10}\)): PLASTiCE (identifying and removing barriers to rational and environmentally friendly management of plastics, including in particular biodegradable and renewable materials. Propagating new environmentally friendly solutions in the area of plastic materials across the entire chain of value) and Eco Paper Loop (the implementation of the Lisbon Strategy for Sustainable Production and Consumption through increasing the recycling levels of paper products to reduce the usage of water and energy in production processes and guarantee conservation of organic coal obtainable from renewable materials);

• membership in packaging organizations: World Packaging Organization (WPO), International Association of Packaging Research Institutes (IAPRI)\(^{11}\), European Bioplastics, Polish Chamber of Packaging which brings together and represents over 100 producers of packaging systems, materials, machines and facilities for the packaging industry\(^{12}\);

\(^{10}\) www.central2013.eu/, 01.09.2013
\(^{11}\) http://iapriweb.org/, 01.09.2013
\(^{12}\) www.pio.org.pl, 01.09.2013
Global promotion of research capabilities and competences to establish co-operation with foreign companies;

Contact with the market through running the column “Packaging Spectrum” in the trade monthly *Opakowanie*, covering the following areas: materials and packaging systems; research and certification; technologies, machines and equipment, logistics, management and marketing; social sciences and law; economy and market. The decision to co-operate with *Opakowanie* was taken in view of the scientific character of this magazine and also because of a wide group of co-operating enterprises and institutions, representing all links in the value chain of the packaging industry;

Organization of Polish Packaging Competition PakStar and Student Competition PakStar, whose objective is to stimulate and promote innovation in the area of packaging in order to improve packaging systems, to better protect packaged products and to raise product competitiveness in Poland and abroad;

Newsletter addressing issues such as legal regulations, subsidies and opportunities for the enhancement of knowledge in the area of broadly defined packaging.

**Summary**

As mentioned above, compared to business organizations, marketing of research institutes is subject to a greater number of internal and external constraints. The shortage of funds, a typical ailment affecting the R&D sector, has, paradoxically, the positive effect of forcing R&D organizations to pay more attention to their human capital, not only in terms of employees’ knowledge but also their interpersonal skills, playing a role in building relationship with customers.

In addition, both ethical issues relating to the world of science and statutory objectives cause R&D organizations to operate in a manner essentially different to that of commercial companies. A commercial company may want to create its image as an expert in a given field by publishing texts in trade magazines or publishing widely available research reports in order to support the attainment of its financial goals as financial results are the ultimate gauge of a company’s performance.

Conversely, top-quality commercial services offered by an R&D organization in a way result from delivering its mission objectives and are complementary to a wide range of activities related to the packaging market. Through offering commercial services, R&D organizations are capable of both maintaining on-going contact with the fast-changing industry and ensuring applications for research outcomes. This model
may prove particularly useful for technical sciences in providing a solution to the problem of financing science and encouraging co-operation between research and industry, as shows the experience of Germany.

In the current economic climate and given the Institute's experience and constraints on state-owned R&D organizations, the concept for knowledge-based marketing developed at the COBRO to support the sale of its services seems to be fully justified.

Bibliography

Websites

Prof. Stanisław Tkaczyk, PhD Eng. — Director of COBRO — Packaging Research Institute and Head of Qualitology Centre at the Faculty of Management of the Warsaw University of Technology. An internationally recognized specialist in the field of materials engineering and management, quality management in particular, he is the author of over 400 scientific publications.

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