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Determinants in the marketing of a research and scientific institution



DETERMINANTS IN THE MARKETING OF A RESEARCH AND SCIENTIFIC INSTITUTION

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Business has two goals : marketing and innovations.¹
(T. Levitt, 1986)

*Business uses marketing.
Every organization which uses marketing is a business.
The goal of a business is not profit but creating a customer.²*
(P. Drucker, 1993)

Introduction

Nowadays, the fact that a participant of any product market conducts marketing activities comes as no surprise. In fact it's surprising only if a participant doesn't use any tools from the rich array of marketing instruments. However, what is very important and requires great knowledge and experience from a market participant is the preparation of a set of market values defining clearly the goals of his activities on the market. These values should be accompanied by a properly matched company strategy (including marketing strategy) allowing the achievement of these values, as well as implementation of the strategy appropriate for the defined market mechanism. Achieving and implementing these values in practice are not easy and what makes this even harder are the processes of globalization, dynamic development of information technology and the dynamics and complexity of market conditions, relations between stakeholders/participants of the market and permanent crises on micro and macro scales.³ This is what poses great challenges for the participants of any product market who want to implement their marketing strategies efficiently. In this respect the participants of the market of research and scientific institutions have to face exceptional challenges and requirements. The market values they offer (mainly innovations)

¹ T. Levitt, *The Marketing Imagination*, Free Press, New York 1986.

² P. F. Drucker, *The Practice of Management*, Butterworth-Heinemann Ltd, Oxford 1993.

³ E. Urbanowska-Sojkin, P. Banaszyk, H. Witczak, *Zarządzanie strategiczne przedsiębiorstwem*, PWE, Warszawa 2011, p. 293-335.

need an exceptional approach due to the fact that they have to satisfy unknown, often new needs of their clients, which have to be precisely described and explained in a comprehensive way (misconceptions concerning GMO or nanotechnology). Sometimes, it is necessary to educate the participant of the target market in a thought-out and intensive way⁴. This very often requires a different approach to the marketing of research and scientific institution, which starting out from traditional 4P or 4C tools will concentrate mainly on the identification of the formed infrastructure of the target market, applying efficient and effective marketing instruments and forming market/marketing relations among stakeholders of innovation processes.

Marketing of a research and scientific institution

An important determinant of the marketing activities of a research and scientific institution is preparation and development of an orientation focused on forming new relations between stakeholders of the target market with its structure. The term of orientation, as mentioned above, should be understood above all in the categories of creating institutional solutions covering the following elements:⁵

- building a business model adapted to the structures and rules of functioning of the market, taking into consideration target segments (adaptation of existing ones) or creating elements of new infrastructure (in case of new solutions or accepting challenges together with a partner, sales);
- working out a strategy which takes into consideration the market rules of competition which will allow the preparation and implementation of the commercialization of solutions proposed in the offer;
- creating a mechanism for a permanent search for new solutions, ideas and products building and strengthening the market position of a research and scientific institution („deepening’ the process of commercialization).

In case of the first element, it depends mainly on working out a ‚customer selling proposition’ understood as a permanently modified and updated market offer, which will be comprehensible and legible for the participants of the target market. The legibility and comprehensibility of the offer to a large extent determines the process of acceptance of the proposed solutions by the target segment. It is also supposed to cover various formulas for the realization of profits (sources of income, calculation of costs, system of margins, price discount, directions of use of income) suitable for the assumed innovative strategy. It covers key resources necessary for the implementation of each market venture, such as: staff, technology, production infrastructure, channels of distribution and marketing. Using these resources appropriately and achieving the effect of synergy will require working out a structure of processes covering operative and remedial procedures, applying norms and the choice of suitable measures for the assessment of implemented tasks and processes. The second element which should be taken into consideration in the conducted marketing activities is the problem of working out in the strategy of a research and scien-

⁴ *GMO to strachy na Lachy, Rzeczpospolita, no. 278 November 28, 2012.*

⁵ *Discussed in detail in: B. Sojkin, Zarządzanie produktem w usługach badawczych, Marketing Instytucji Naukowych i Badawczych, Prace Instytutu Lotnictwa nr 208, Warszawa 2010, p. 105 – 112.*

tific institution a very important aspect concentrating both on the current and expected market rules and rules of competing. In detail, it is necessary to determine:

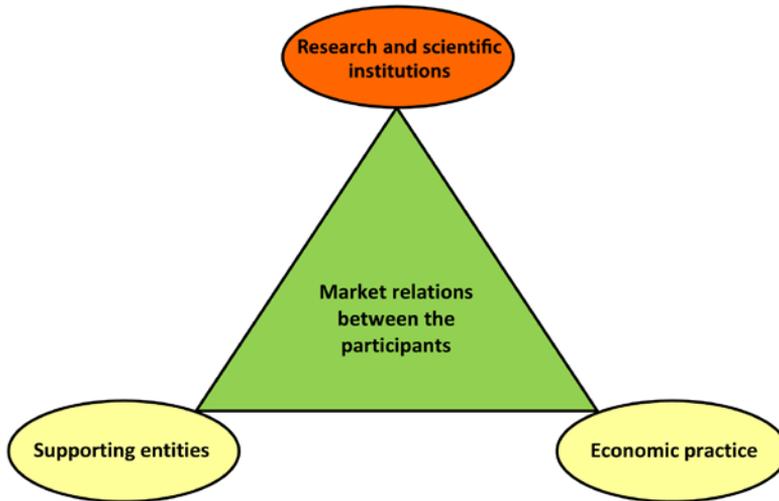
- sources of competitive advantage understood as the client's search for value;
- the possibilities of deriving benefits from the competitive advantage on the basis of possessed resources such as specialist knowledge, market experience, decision-making procedures, staff and their skills providing the possibility of conducting market activities and the efficiency of implementing solutions;
- working out the strategy of a 'value for client' (new product) and its scope as a basis for the preparation of marketing strategy, which will allow integrating the value with the portfolio of products in form of proposed market solutions as an extension of the S-T-P model and taking into consideration various elements of characteristics of the proposed products in the implementation of strategy.

As a consequence, it is necessary to prepare a marketing strategy in which instrumental strategies are built in such a way that there won't be any problems with preparation and implementation of the process of commercialization of the proposed solutions. The third important determinant of the marketing of research and scientific institution is the issue, which can be treated as 'obvious' in market categories. As it seems, this element is inherently associated with such institutions; that is, the search for new solutions, ideas and products building and strengthening the market position of an institution. It could be called 'deepening commercialization' and this comes from the fact that actually, research and scientific institutions are obliged to commercialize all their solutions and all their activities should be subordinate to this process. Obviously, it is necessary to remember that there is no such thing as universalization of commercialization; comparing this process on various types of product markets: food, industrial, technology and scientific research it is possible to conclude that there are fundamental differences between the implemented stages of conduct and their importance for the whole process and in the role and tasks carried out by the participants. Thus, commercializing research and scientific achievements on various markets it is necessary to take into consideration not only the procedure of conduct and associated actions, but mainly the conditions resulting from the essence of satisfied needs and the characteristics of the participants of the process and their mutual relations (picture 1).⁶ Thus, it is necessary to pay attention to systematic evaluation of the adopted market solutions and at the same time focus on the product (value for the client) and market communication. It is advisable to monitor the market in the aspect of decisions determining the range of utilization of marketing instruments and the preparation of operative marketing programs (assessment of the level of risk). An important aspect connecting instrumental programs conducted in course of implemented marketing strategy is the integration of market activities within a research and scientific institution and other participants of the process (relations) together with follo-

⁶ Discussed in: Przewodnik. *Komercjalizacja B+R dla praktyków*, MNiSW, Warszawa 2010, p. 14.; V. K. Jolly, *Commercializing New Technology. Getting from Mind to Market*, HBR Press, Boston, Massachusetts, 1997, p. 4.; D. Rafinejad, *Innovation, Product Development and Commercialization*, J. Ross Publishing, Fort Lauderdale, 2007, p. 185.; B. Sojkin, M. Małecka, *Komercjalizacja innowacji produktowych na rynku żywności*, in: M. Walczycka, A. Duda-hodak, G. Jaworska, T. Tarko, *Żywność projektowana, część I*, Uniwersytet Rolniczy im. H. Kołłątaja w Krakowie, Polskie Towarzystwo Technologów Żywności, Kraków 2011, p. 153.

wing the rules of implementation of programs and current assessment of their development.

Picture 1. Forming market relations of the participants of the research and scientific process.



Source: Own materials.

Conditions for the marketing of research and scientific institutions

During the discussion concerning the issue of influence of various conditions for conducting marketing activities in a research and scientific institution, such factors as: the level of specialist knowledge, gained experience, research procedures, technical equipment, owned technologies or professional skills of the personnel are highlighted most often. Undoubtedly, they belong to important and significant factors, especially in the context of the ability of an institution to conduct its basic activity, which can be identified as the conducted research and scientific processes. It is impossible to marginalize their influence on conducted market activities, but it is necessary to remember that: marketing in the scientific and research sphere requires different relations within and outside an institution. For this reason, it is necessary to remember that in market reality, the key factors determining marketing activities are mainly scientists/researchers as participants/creators or scientific and research processes, economic practice as target clients and comparably new participants of the market such as institutions providing support for research and scientific activities.⁷ Recognizing scientists/researchers as the basic determinant of marketing in a research institution has its logical justification resulting from their essential and leading role in the process of introducing the created customer value to the market. Moreover, it is associated with

⁷ The following can be classified as institutions supporting research and scientific activities: technology parks, technology incubators, pre-incubators and academic business incubators, business incubators, technology development centres, seed capital funds, networks of angel investors, local credit funds, credit guarantee funds, technology platforms, training and consulting centres. It can also be said that clusters belong to this category of institutions.

their characteristic attitudes and behaviours in the institution and on the market, as well as with their position in the institution. For this reason there are many issues which discourage, limit, or hamper their activity and involvement in marketing activities taken up by their institutions. The following aspects contribute to these issues:

- focus on publication and education/teaching and not on practical utilization/implementation of research results; because real transfer of research results to business doesn't play a major role in the path of scientific career. What counts are almost solely points for publications, achievement of didactic goals, as well as awards and distinctions not associated with the market effects of research;
- lack of professional support from own institution (law, marketing, finance etc.), which is the result of lack of professional support staff at universities, in institutions (separate, active cells) dealing with real help in raising funds, solving legal problems (eg. public orders) or promoting research results (thanks to which a scientist could focus on research and not on administrative work and solving problems outside his scope of interest);⁸
- unclear rules for raising funds from public sources (NCN, NCBiR) causing a clear dissonance between the expectations of ministerial institutions with regard to the commercialization of research results and the provisions in contracts for research grants, making it impossible to derive profits from these results;
- lack of conviction and motivation to assume risky research, due to the opportunity to derive profits from other research and scientific institutions (universities). This in turn leads to achieving a comparably high level of income and causes unwillingness to take the risk of cooperation with business or investing own assets in introducing scientific achievements to the market. This also leads to preference for safe scientific grants (small amounts, at best for research that has been already carried out before);
- lack of experience in managing research results and their commercialization, which results in the inability to: search for sources of financing in an efficient manner, creating interdisciplinary research teams and leading them, to effectively communicate research results or maintain good relations with business practice
- inability to ,sell' scientific achievements as a value for the client coming from low communication skills and the ability to prove the validity of own arguments and the benefits generated for the market;
- cult of basic research (applications are not real science, but just an addition) causing excessive concentration on own scientific interests and own achievements in research. This leads to the lack of confrontation of research results with the needs of the market and past achievements and the still common conviction that ordered research works/implementation works are worth less than basic research.

⁸ Por. Dziennik Gazeta Prawna nr 126/21012 i nr 229/2012; Rzeczpospolita nr 266/2012.

In case of the second participant of the market and the partner in the scientific-research process, namely, economic practice, there are a few important detailed determinants which influence its market behaviour and the marketing activity presented by a research and scientific institution. Economic practice in innovative processes is on the one hand the target segment of the proposed solutions and on the other hand it constitutes the source and inspiration for many ideas, projects and challenges as potential buyers. The determinants presented below are to a large extent the derivatives of its attitudes and market behaviours created on the basis of own experiences and assessment, reflecting the activity of economic practice, which in a period of dynamic technical – technological changes should bring about the emergence of clearly defined needs and expectations. However, it is hard to unequivocally confirm these facts, as in its case there are many rather pessimistic symptoms which are significant for forming proper relations with other participants of the market. This is expressed by such appearing tendencies as:

- lack of thinking about innovation, which is illustrated by the concentration on just the current tax, accounting and financial problems as well as on boosting sales operations; as a consequence there is not enough time and there are not enough assets for systemic innovative actions;
- lack of awareness of reporting needs to the science is apparent and the comparably low proportion of people with higher education in production companies results in lack of understanding of the characteristics and the utilitarian value of research conducted at universities for the needs of business. The effect of these attitudes is reducing possible contacts with scientists to ordering basic expertise/assessments/evaluations, which are significant in solving current, operative problems and not strategic issues;
- the lack of unequivocal financial incentives for innovations, which should be all about working out a system of fiscal preferences for innovative companies, compensating for spending on the development of innovative technologies/products;
- lack of a worked-out system results in the emergence of difficulties in implementation, which are the cause of low inclination to taking risks and preferring safe business models, which involve functioning as sales representatives of foreign producers or buying ready technologies from the West;
- appearing voices and opinions suggesting low usefulness of the results of national scientific research and about the lack of readiness of universities/scientists to cooperate based on clear market rules cause a discouraging atmosphere in the media, which confirms negative opinions about Polish research and scientific activity and strong inclination of the Polish economy towards resorting to foreign research and scientific achievements.

The last partner of the innovative process are comparably new entities on the market. They are called institutions of support for research and scientific activities (especially research and development), which promote and support this kind of activities carried out by various business entities.⁹ In many cases these entities conduct these activities in course of their own market activity, but often they are institutions, which include motivation, support and implementation of innovations in the scope of their activity.

⁹ See: *Ośrodki i innowacji przedsiębiorczości w Polsce*, PARP, Warszawa 2012.

For this reason, their active role in the development of scientific and research activities doesn't only supplement market activities, but often stimulates and determines the success of commercialized solutions and projects. However, the reality of market activities conducted by these entities often to a large extent determines the possibilities and defines the scope of marketing activity of research and scientific institutions.¹⁰ It is associated mainly with various phenomena in the market behaviours of supporting entities, such as:

- passive attitudes of support institutes, which in many cases involve the transfer of technology and raising EU funds from behind the desk and reducing activity to basic informative and administrative actions, instead of initiating actions supporting projects and the development of new ideas and concepts;
- not very motivating system of implementation of research results not preferring activities and initiatives, but involving stable, monthly salary for just 'staying' on a position and lack of an attractive system of rewards for above-standard achievements, which doesn't encourage employees to pursue inventive ideas;
- negative influence of the 'granting system' (from grant to grant), which has led to making EU funds the main source of financing, concentration on training activities and weakening self-preservation instinct – not thinking about self-financing of units in the long term;
- focus on creating tools at the cost of solving real problems and taking up popular research areas (commercialization) and actions facilitating raising funds from the European Union, instead of solving real problems in the area of relations between science and business (information platforms and communication tools, instead of activation and raising the awareness of entrepreneurs);
- rather unclear structure of bodies of support and the lack of coordination in establishing science parks and transfer centres leading to their excessive concentration in big cities, as well as the lack of specialization and concept for further functioning beneficial for the market. In the current reality the lack of unequivocal criteria for substantial market assessment and evaluation of grants not only in the short-term perspective, but also in the perspective of 5 years.

Conclusion

To sum up these considerations, it is necessary to pay attention to two issues, which undoubtedly affect the matters discussed in this article. These are certain Polish weaknesses or national defects which can be boiled down to thinking mainly in the category of problems and not searching for possibilities and finding ways to take advantage of these possibilities. For this reason at most meetings concerning the possibilities for the commercialization of an invention or technology or starting cooperation with business, the issue dominant in the scientific environment are worries about the protection of intellectual property rights or perceived, often artificial obstacles hampering such cooperation. Moreover, the proverbial „kindness“

¹⁰ This is confirmed by the results of regularly published research data - *Ośrodki i innowacji przedsiębiorczości w Polsce, PARP, Warszawa 2012, p. 46.*

expressed in a very simple and clear form, leading to a situation where any proposal for an innovative, ambitious action presented on a forum is met with an avalanche of negative comments and at the same with no voices of support or even reasonable critique. At the same time the success of a scientist in cooperation with business results in lack of full acceptance of the environment and often behind-the-scenes accusations of dishonest practices.

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