

THE USE OF MARKETING RESEARCH IN THE DEVELOPMENT OF STRATEGIES FOR BUSINESS ENVIRONMENT INSTITUTIONS ON THE EXAMPLE OF WROCLAW TECHNOLOGY PARK

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Abstract

The basis for the development of Polish Economy is, among others, the departure from the image of the country of cheap labour. A significant role in this change is played by business environment institutions, i.e. technology parks that support new/small enterprises, help in the development and access to modern technologies, contribute to employment, affect the increase of companies' competitiveness on the market and create opportunities for internationalization of entities located in the park. Technology parks in their strategies and operations often use information from the conducted research.

Research on the needs of technology park customers on the one hand provides information on current and future expectations as to the institution's offer itself, on the other hand provides information on the quality of services provided. The research carried out among park employees also presents the areas of changes that should be made, and thus be reflected in the strategy being developed. Therefore, these are multifaceted studies, and the applicability of research results should be for more effective management.

The aim of the article is to present and discuss marketing research (their areas) used by business environment institutions, especially technology parks, at the stage of creating an organization strategy.

Key words: technology park, research needs, quantitative research, qualitative research.

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Introduction

Technology parks have become a permanent part of the landscape of the Polish economy. They provide support to new/small enterprises, help in their development, access to modern technologies, contribute to employment, affect the competitiveness of companies on the

market and create opportunities for internationalization of entities located in the park. Literature widely discusses their impact on the innovation and competitiveness of regions and countries.

In the last years the role and importance of marketing research has been growing. For a long time, such activities have been used only by enterprises, but now also other entities use them: local government units, foundations, associations, business environment institutions (BEIs), which appreciate the benefits and derive real profits from their implementation. Such a research is also used in the operation of technology parks. It provides valuable information regarding the services dedicated to resident companies, it indicates future paths of service development, helps to eliminate those non-profit ones. Research support the organizational activities of the park and help in strategic areas, such as the development of strategy of the park.

The aim of the article is to present and discuss marketing research and its areas used by business environment institutions, especially technology parks, at the stage of creating an organization strategy.

1 Marketing research in the context of technology parks - definitions and applications

Business environment institutions (BEI), offer entrepreneurs the assistance with formation, operation and development of companies (Daniluk, 2017, p. 128). Business environment institutions in Poland often operate in organizational networks ensuring greater efficiency and effectiveness of support. An example of such a network is the National System of Services (KSU) for small and medium-sized enterprises, in which non-profit organizations - providing advisory, training, information, financial and pro-innovative services for SMEs - work together. The network is coordinated centrally by the Polish Agency for Enterprise Development (PARP) (Lisowska, Stanisławski, 2014, p. 1274)

Business environment institutions include technology parks. The most well-known definition of a technology park is the definition of International Association of Science Parks (IASP). A technology park is an organization led by a highly qualified team of specialists. Its aim is to raise the social well-being of a given country by creating and promoting a culture of innovation, competitiveness among companies and knowledge-based institutions (International Association of Science Parks, 2018).

Whereas according to the American Marketing Association „Marketing research is the function that links the consumer, customer, and public to the marketer through information-- information used to identify and define marketing opportunities and problems; generate, refine, and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process. Marketing research specifies the information required to address these issues, designs the method for collecting information, manages and implements the data collection process, analyses the results, and communicates the findings and their implications” (American Marketing Association 2018).

One definition of market research comes from UK Market Research Society „...one of the most useful tools in business, any business. It is the way in which organisations find out what their customers or potential customers need, want and care about” (Bredley, 2013, p. 7).

K. Mazurek-Łopacińska (2016, p. 21) defines „marketing research includes the diagnosis of the information needs of the enterprise (institution), variable’s selection and the collection, analysis and interpretation of data used for making marketing decisions”. According to G.A. Churchill (2002, p.15) „marketing research is diagnosis of information needs of the company (organization), variable’s selection and collection, analysis and interpretation of data used to make marketing decisions.”

There is limited research around appreciation within service research which is surprising, given that service encounters are social interactions involving service customers and providers.. Business environment institutions, as institutions providing services to companies, should constantly strengthen their relationships with clients and increase their positive experience, thus building their loyalty (Nasr, Burton, Gruber 2018, pp. 142).

Due to the different approaches in marketing research, it should be assumed that the two main areas of conducted research by technology parks among resident companies can be (Mażewska, Osiadacz, Tórz, 2014):

- research on customer needs,
- research on the quality of services.

Research should be considered in two dimensions and two different applications of analytical results. First of all, this measurement is to provide qualitative information supporting the marketing process for creating new services. Secondly, it should provide feedback to the departments responsible for the operational activities of the technology park on the quality of services provided. Both categories of information should support the management of the technology park in developing the park's strategy (Mażewska, Osiadacz, Tórz, 2014).

These studies are an integral and key component of the organization's management. They should be the first stages of developing an organization's strategy, presenting the current state of the institutions, determining areas for further development.

The development of marketing research in general, as well as in the context of business environment institutions (including technology parks), is particularly influenced by both internal and external factors. Marketing research should provide answers to the following example questions presented below:

- what direction of development of services due to the internal potential or existing external conditions will be the most advantageous,
- what are the trends regarding current and future services provided by BEI (including technology parks) on domestic and foreign markets, what factors create them
- what are the expectations and needs of existing resident companies,
- what are the expectations and needs of future / potential resident companies,
- what is the level of satisfaction with current services provided,
- which services are the most important for clients - resident companies,
- what corrective actions are required by the existing services provided by the technology park.

The received answers to the above questions are support in developing the strategy and setting directions for further development of the technology park.

2 Marketing research to support technology parks in developing organization strategies

Desk Research analysis is one of several important methods of collecting information. This analysis uses secondary data that has been developed for purposes other than solving the problem being the subject of marketing research. Secondary data is the documentation showing the functioning of business institutions and other organizations, reports of market research agencies, consulting companies, governmental and statistical offices' publications. The analysis is the basis for conclusions about the research problem.

The advantage of secondary information is that its use contributes to saving time and money of the entities using it. The disadvantage is its heterogeneity, the difficulty of obtaining comparability in selected cross-sections. In addition, it is important that this data is current, available to the researcher and received from a reliable source (Mazurek-Łopacińska, 2016).

Qualitative research is primarily about understanding reality, not measuring it. The results are not generalized to the population, the method of interpretation is more flexible, subjective, but it answers the questions which in the case of quantitative research are not discussed. Qualitative research is aimed at a closer look at the analyzed topics and a description, interpretation and even explanation of some behavior (Gibbs, 2011).

W.G. Zikmund, B.J. Babin (2010, p. 97) claim that “qualitative research can be performed in many ways using many techniques. Orientations to qualitative research are very much influenced by the different fields of study involved in research. These orientations are each associated with a category of qualitative research”.

The most popular methods of collecting primary data in qualitative research are individual in-depth interviews and focus group interviews. These methods are most often carried out in the form of a free discussion between the respondent or a group of respondents with the moderator. Without a rigid "sticking" of questions as in the case of a questionnaire, and with the help of a topic guide only, the moderator gradually deepens those areas that are most important from the point of view of the purpose of the research.

Individual in-depth interview (IDI), depending on the level of formalization of the intelligence structure (the freedom to ask questions), can take the form from a free interview to a fully structured interview. However, the most popular used is a semi-structured interview, that is, such in which „the researcher uses the list of problems that should be raised during the interview: a list of questions to be asked, in the form recognized by the researcher as appropriate and in any order (...)This type of interview gives the researcher more flexibility during its execution, and at the same time allows a certain unification of data that is obtained in interviews on the same subject” (Sztumski 1995, p. 121). Questions in the IDI interview are not standardized, and the respondents have full freedom in their answers. During an individual in-depth interview, exploratory research questions, attempts to explain or understand motivation, attitudes or behaviors are undertaken. Its results allow to specify the created service, and at the same time can be used to verify the results obtained in the quantitative study.

An individual in-depth interview is a very useful method in planning services. It is used when there is a need for more in-depth knowledge and information that cannot be obtained with the help of data analysis. The argument for using this tool is the ability to capture essence of the problem, its flexibility and the ability to deepen the received information about the attitudes or motivations of the respondents. However, its disadvantage is subjectivity.

Focus group interview (FGI) is an unstructured, free-flowing interview with a small group of about six to ten people. Focus groups are led by a trained moderator who follows a flexible format encouraging dialogue among respondents (Zikmund, Babin, 2010).

It can be used to analyze the current offer of technology park services. The name of this method reflects well its features - this research is carried out in a group, takes the form of an interview, and at the same time it is a discussion and is focused (concerted) on a specific topic (Maison, 2001). The discussion is partially structured, allows researchers to focus on issues relevant to the study, without putting pressure on the literal questioning. An important advantage of this method is the dynamics of the interview and the presence of interaction. Contact with other members of the group stimulates the response and facilitates the expression of emotions. Therefore, the focus allows generating new ideas and solutions, and allows to understand how people process and understand the information transferred to them, they are also suitable for revealing misconceptions of participants (Barbour, 2011). Focus groups involve in-depth consideration of open questions and stimulus materials (Maison, 2001).

Focus group interview is often used in researching the image of a company, brand or product and in the evaluation of, for example, initial services. It is important that qualitative research can provide an empirical material for the development of a questionnaire (quantitative research), more related to the needs of the client and allowing to answer the research questions.

Quantitative research is a complex and multistage process requiring the implementation of specific methodological rules. In this case, the usually studied population (eg. all consumers of services provided by a technology park) may be too large to include all the members, so research must be representative, i.e. focus only on some of the individuals of the community we are interested in (Sztumski, 1995). This method is best suited for public opinion research.

The survey is also a great tool to measure in a large population of attitudes and views, including attitudes towards a given service or organization. In this method a number of research techniques can be used, of which the questionnaire technique is of primary importance, carried out through direct research, telephone surveys Computer Assisted Telephone Interview (CATI) or research via a web-based network - Computer Assisted Web Interview (CAWI). Technology parks with their clients' bases (resident companies) often use Internet surveys (CAWI) in their research.

Quantitative research is treated as preliminary research, which serves the diagnosis of the existing state and may also be a source of ideas for preparation and, subsequently, for the introduction of new services tested in qualitative research.

3 Marketing research as a support for the strategy of Wrocław Technology Park¹

Description of marketing research conducted by Wrocław Technology Park was made on the basis of research methodology and analysis of results, which was one of the elements of the development strategy of Wrocław Technology Park for 2016-2025.

During the development of the strategy an extensive quantitative-qualitative research was conducted. Triangulation was used in the research process: quantitative and qualitative techniques were combined, and the analysis made was based on existing (secondary) data from various sources.

Based on the analysis of research and the development of earlier results the individual parts of the development strategy of the company Wrocław Technology Park for 2016-2025 were formulated.

The Desk Research analysis was mainly related to the analysis of the technology park market in Poland. This method provided information on the organizational and legal form of the parks, pointed to their missions and strategies. In addition, it concerned the leading directions of activity and presented technological areas of interest to them.

The defined directions of activities of the analyzed technology parks in Poland are e.g.: research services, support of the science and economy sector relations, participation in the implementation of innovative ventures, supporting entrepreneurship development, building coalitions and cooperation platforms, setting trends for development strategies, participating in the region's economic promotion, creating effective entrepreneurship support tools, providing entrepreneurs with rental space, business support services and assistance, creation and transfer of modern technologies and innovative solutions to economic, creating incubators and academic business incubators, increasing the effectiveness of using research results for the needs of the economy, coworking, virtual office, etc.

Qualitative research was conducted in the form of individual in-depth interviews with selected WPT employees. The qualitative study was carried out in two aspects:

¹ The section was prepared on the basis of: M. Haberla, P. Wolczek, *Strategy of development of the Wrocław Park Technology SA company. for the years 2016-2025*, Wrocław 2016

- assessment of the internal conditions of WPT development.
- assessment of the external conditions, treated as opportunities and threats.

Qualitative research shows that the employees of Wroclaw Technology Park are satisfied with working in this place. They consider the WPT to be an innovative place enabling development. They also appreciate the opportunity to cooperate with interesting, energetic people. In addition, in their opinion, Wroclaw Technology Park has many strengths. Among the most frequently mentioned are: location, laboratories equipped with modern equipment and apparatus, the possibility of cooperation with other companies. Among the plans for the future and the WPT vision for the coming years is primarily the creation of a "microworld" - a place where companies residing in the WPT use each other's services, as well as undertake cooperation in the creation of new products and services. In the mind of WPT employees, the biggest problem is communication, both between Park employees and residents, as well as within the organization. This mainly applies to aspects related to the day-to-day operation of the park, operation of devices (e.g. problems with air conditioning or ventilation). As a chance for development, it was recognized that wider cooperation with scientists was initiated, thus acquiring new partners and companies.

Whereas goals of quantitative research were:

- to get to know the opinions of resident-clients of Wroclaw Technology Park about its functioning.
- to identify sources of information on WPT and factors influencing the decision to locate company in the Park.
- to obtain a comprehensive picture and in-depth knowledge on the degree of use and future demand for services provided by Wroclaw Technology Park
- to indicate the strengths and weaknesses of the WPT.

Quantitative research shows that respondents appreciate Wroclaw Technology Park for its location, access to modern office, laboratory and production space, for the laboratories in its offer and accessibility to them, and the possibility of using training and conference rooms. The main shortcomings complained of by Park tenants are: difficult contact with the landlord, the high price of rent and insufficient parking spaces also indicate a weakness.

In the opinion of respondents, Wroclaw Technology Park, willing to better meet the needs of its clients, should in the first place:

- improve communication with tenants, gather information from them and try to respond to it on an on-going basis,
- improve service / technical support,

- provide feedback on the status of reported problems, eg by introducing a tracking and notification system.

Conclusions

Analyzes and research conducted as a part of development of the strategy of Wrocław Technology Park were one of the most important elements because they provided a number of information about the institution itself, from the perspective of both employees and resident companies. They provided qualitative information for the design of new services. It is difficult to focus on the ever-growing market of business environment institutions, not to take into account trends, customers' needs - resident companies, not to adapt the offer and not to expand it with new services or to remove services for which there is no need.

Properly defined development direction of the WPT, well-prepared offer, customer needs, the offer ultimately contributes to the development of the technology park and supports its promotion by means of resident companies among potential customers. The results of the research were conclusions and recommendations that indicated the areas of intervention, they also helped the management of the technology park in making decisions regarding creating new services, adapting existing services, increasing their quality to the needs of clients or abandoning services for which there is no demand.

It should also be remembered that in addition to surveys of customers - resident companies, a technology park, in order to see a full picture of the situation, should also include in its operations and implemented changes the analysis of the external environment. Activities undertaken by other competitive BEIs, and actions implemented by model technology parks in the world. As a result, a technology park with knowledge about the expectations and needs of clients, taking into account the analysis of the immediate and further environment, is able to fully consciously prepare and implement strategies along with planned activities.

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