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Relationships with customers as a determinant of the innovation process in the enterprise

Key words: process innovation, ability to innovate, innovation, customer relations, CRM

Summary: The purpose of this article is to show the relationship between the use, by the company, of specific method of acquiring knowledge from the outside, the formation of mutually beneficial relationships with customers (relationship marketing), and their realization of the innovation process.

The idea of relationship marketing and Customer Relationship Management system (CRM) is to build long-term relationships with the environment, in particular with customers, in order to increase the profitability of the company as well as cost reduction. Relationships with customers (more CRM) are an effective tool for gathering information for the innovation process, both at the stage of invention innovation (increase the innovative capacity of the organization) and at the stage of diffusion of innovation (innovative activity). The condition for the effectiveness of personalized marketing include: close contact with the customer, control, and continuous analysis of their course as well as information technology and databases.

The results of extensive empirical studies allowed for positive verification of the given argument. The use of customer relations is beneficial to the process of innovation, and ultimately leads to offer customers innovative product tailored to your expectations.

Companies are aware of the fact that customers are an important source of knowledge in the innovation process, and the human factor plays a leading role in creating innovation.

The focus on relationships with customers is especially important for small and medium-sized businesses that have limited financial resources (inter alia in the area of conducting research) in terms of identifying new and costly innovative solutions.

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1. Introduction

Peter Ferdinand Drucker (1) argued that a company which cannot create innovation is lost. In following these words can be said that the ability to create and implement innovate in the market has become a sine qua non for the competitiveness of modern enterprises, and thus one of the main elements of a knowledge economy and strategic importance in the context of generating economic growth (and consequently the well-being of societies). On the other side approach to innovation and how to create innovation in enterprises is changing with the emergence of new concepts and approaches which more and more comprehensively capture the process of creating innovation at the level of production units, or service: from the application of the linear model by the National Systems innovation and later concepts of a new approach to creating innovation. The development of these theories is evidence of the growing importance of innovation and the development of theoretical approaches in this regard. The most important and most visible trends in this area should include a departure from the linear approach to innovation and go beyond the technological aspects of innovation (see: 2, pp. 705–718). More and more in the context of stimulating innovation is becoming increasingly important of non--technological approach, focused on the creation and use of relationships, such as innovation networks, international networks and relationships with stakeholders. This is due to a new perspective in the perception of the specific nature of the innovation process—a process that requires interactivity of many entities/ participants (from different areas of activity). Relational activity is of key significance to the development of innovation.

Joseph Alois Schumpeter (3, p. 104) stressed that innovation is not only based on creativity but also on individual and institutionalized activities. Relational activities include relations between entities, entities and technologies, companies, research agencies and state organizations (4, p. 240) which are the components of the innovation system.

In this context, innovation policy focuses primarily on strengthening and stimulating relationships among interested groups of entities (such as public-private partnerships, programmes and projects network—in this cluster, the scientific cooperation with entrepreneurs, technology parks, etc.). Research in the field of innovation, especially implementation processes, requires a multi-disciplinary and multi-dimensional approach and the description of cause-effect relations between the activities of various organizations and the development of innovation.

The aim of this article is to show the relationship between the use, by the company, of specific method of acquiring knowledge from the outside, i.e. the formation of mutually beneficial relationships with customers (relationship marketing), and their realization of the innovation process.

To achieve the objective was possible it was assumed that the innovation process (invention and diffusion of innovation) implemented by the company depends on its ability to innovate. The ability of enterprises to innovation (innovative capacity) refers to the ability of significant modifications and improvements to existing technologies and creating new (5, pp. 899–933; 6; 7), it is seen as the basis for creating value from innovation (8, pp. 278–289), and even as a driving force of economic growth (9). In many studies (see: 10, pp. 606–622; 11, pp. 19–43; 12, pp. 507–517) it can be found to say that the ability of innovative companies is not based on the results of ongoing and/ or acquired research and development, but in the daily activities in the company. The ability of this in a special way shape the:

- managerial skills and worker to innovation, especially knowledge from experience;
- modern infrastructure and systems used, especially IT technology;
- level of cooperation in knowledge management, in particular the level of relational activity with stakeholders (customers, suppliers, etc.);
- organization of work and management;
- protection of the knowledge arising within the company.

The modern approach to clients' participation in the company's innovation process differs considerably from the traditional approach. The concept of relationship marketing and Customer Relationship Management (CRM) is based on building long-term relationships with the business environment (especially clients) aimed to increase profitability and reduce costs. It is assumed that customer relationships have a positive impact on the innovation process. CRM is an effective tool for acquiring information for the innovation process both at the stage of inventing innovation (increasing the innovation potential) and at the stage of the diffusion of innovations (innovation activities). The effectiveness of individualized marketing is conditioned by close relationships with customers, continuous and close monitoring of the process as well as IT systems and data bases.

2. Mutually beneficial relationships with customers as part of the innovation capacity of enterprises

Each organization continuously interacts with its stakeholders, because they determine its function. It must therefore focus on identifying stakeholder groups and understand their needs and expectations. In a market economy the most important group of stakeholders are the customers. Innovations are the basis for the modern concept of marketing based on relationships with customers, and what is more, a basic prerequi-

¹ These determinants of the innovative potential have already been extracted during the studies quoted later on in the article, using analysis of influence factors. On this basis the factors that remained and will remain in an important cause-effect relationships with innovation were indicated.

site to building lasting client relationships. According to the concept of relationship marketing, innovations are evaluated from the point of view of customers—provide them with new values through the creation of new products, technologies, approaches and systems in such a way as to increase the level of satisfaction and loyalty (13, pp. 230–231). The company may initiate actions that will lead to the identification of needs of customers. It should be emphasized that proper identification of purposes, especially requiring or not fully satisfying the customer, is the key in the process of creating innovation. Moreover, in special cases, the client may be a creator, and even co-producer of the product. Participation of customers in the innovation process carried out by the company is important for one more reason: customers using the products and services gather knowledge that can be invaluable for them. As Bogusz Mikuła notes (14, p. 174), innovation can be determined not only by knowledge about customers, but primarily through the use of knowledge possessed by customers. The condition is, however, one. The company must be able to use this knowledge, i.e. to get to know how to manage it.

Establishing efficient forms of communication with customers (stakeholders) and their continuous improvement is the most important. System efficiency of marketing communications and the simplicity of the transaction system is also an important determinant of the ability of innovative companies.

Referring to the customer requirements that define the area and determine the direction of innovative activity organization, we shall enumerate (16, pp. 58–65):

- service speed;
- the quality of products or services;
- attractive prices;
- a simple trading system.

Also important are the expectations of the organization to customers. Here, the most important are (17, p. 316):

- revenue and profit;
- an increase in sales;
- opinion of consumers;
- the trust of customers

The requirements (objectives) of the company should be complemented by the most important, the introduction of new products, as a result of the innovative activity of the organization.

Table 1 shows the above-mentioned criteria for evaluation the degree of achievement of the objectives of mutually beneficial relationships with customers and at the same time assessing the level of innovative activity organization along with the meters.

 $$\operatorname{Table}\ 1$$ The criteria and measures assess the degree of achievement of the objectives of mutually beneficial relationship with customers in the innovation process

Evaluation criteria—customer perspective		Measure
1.	Satisfaction	- cost of maintaining current customers;
		- new customer acquisition cost (in relation
		to the cost of maintaining current customers)
2.	Service speed	- the average Time Realization of Supply;
		– time responses to RFQs;
		– proportion of contracts supplied on the time
		in the general contracts
3.	Quality of product/ service	– number of returns/ complaints
4.	Attractive prices	- the number of customers;
		– the number of new trades
5.	A simple trading system	– number of transactions;
		– number of interventions
Evaluation criteria—company perspective		Measure
1.	Revenue and profit	- income from new products;
		– profitability of new products/ services
2.	Increase in sales	– increase of income from sales
3.	Consumer opinion	– number of positive opinions;
		– number of implemented consumer
		suggestions
4.	Consumer trust	- number of customers;
		– average size of orders
5.	Introduction of new products/ processes	- number of introduced products/ processes

S o u r c e: Authors' own elaboration on the basis of (16, 17).

The multiplicity of measures presented for the issue of measurement capabilities and innovative activities in the context of relationships with customers is complex and difficult, but it is necessary and related to the management of these relationships. Customer relationship management is to create value both for the customer and the whole organization, and it is connected with collection and processing of information about customers. The information system—being an integral part of CRM and at the same time supporting the company's actions of how to use the acquired data for creation and strengthening bonds with customers—helps in proper management of knowledge about the clients. The essence of CRM refers to the complex process of building and maintaining relationships with customers, to the benefit of the two sides in relationship.

Table 2

3. The use of relationships with customers in the innovation process—the results of empirical research

The results of empirical research based on a multiple choice questionnaire are presented below. The study is based on a sample of 32 tourism companies, most of them having their seats in Małopolska, especially in the region of Tarnów.

Among the surveyed companies, the largest group: 48%, were small businesses, employing up to 50 employees, including micro-enterprises: up to 10 employees (which is 15%). Approximately 31% are medium-sized companies (50–250 employees). Large companies (250–500 employees) are only 7% of the total amount, and very large ones (over 500 employees) make 14% (Table 2).

Number of employees in respondents enterprises

Employment	Share in the total number of enterprises (%)
Up to 10 people	15
11–50 people	33
51–100 people	17
101–250 people	14
251–500 people	7
Over 500 people	14
Total	100

Source: Authors' own elaboration.

According to the concept of open innovation and relationship marketing, companies should rely on their customers as a source of information for creating innovations. The sources of knowledge for implementing innovations (according to respondents) are as follows: customers (21%), competitors (18%), merely 5%—R&D centres, and universities (3%) (Figure 1). The results indicate that Małopolska's companies rely on market-verified information.

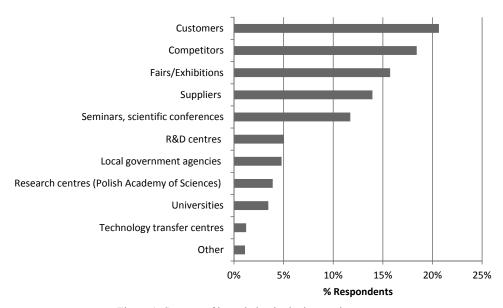


Figure 1. Sources of knowledge in the innovation process

Source: Authors' own elaboration.

Analysis of the sources of knowledge in the innovation process for the surveyed enterprises also allows identifying the processes and mechanisms for the provision development of innovation, because it points to the leading role of the human factor in the creation of innovation (here including customers and other market participants). In this context, the focus on relationships with customers is especially important for small and medium-sized enterprises, which have limited financial capacity (inter alia in the area of conducting research) in terms of identifying new and costly innovative solutions

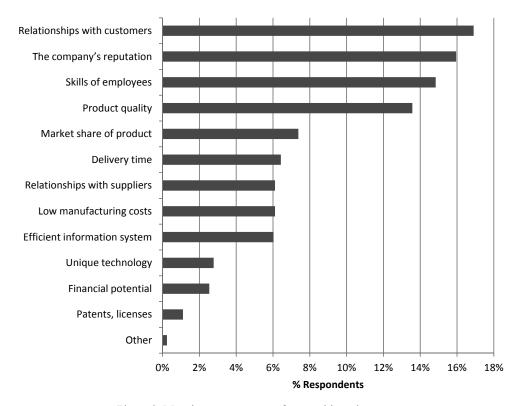


Figure 2. Most important source of competitive advantage

Source: Authors' own elaboration

As shown in Figure 2, researched companies are aware of the importance of customer relations. 17% of them indicated the relationship with customers as their main, most important source of competitive advantage in the market. Indications of the quality of products (14%) and order processing time (6%), i.e. measures of the objectives of profitable customer relationships, are indirect evidence of this.

The fact that customer relationships play a major role in the innovation process, especially at the invention stage, is reflected in the participation of the particular groups of stakeholders: 69% of customers regard their participation to be active and significant. All the analyzed companies confirm their clients' participation in the innovation process (Figure 3).

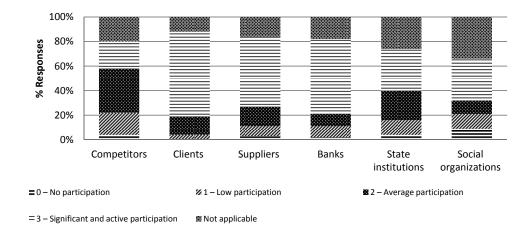


Figure 3. Stakeholder participation in the innovation process at the stage of inventing innovation

S o u r c e: Authors' own elaboration.

Effective integration of customers in the innovation process requires the creation of businesses between the client and the organization of effective communication platform that will listen to their needs and know the motives of their actions. Thanks to this information it is possible to analyze the needs of a particular purchaser and prepare an offer for individual expectations of the customer.

62% of respondents regard improved interactions with customers (understood as greater responsiveness and building customer relationships) to be one of the major business objectives achieved with the use of IT systems. Knowledge management tools include the following: management support systems (CRM): 4%, customer data bases: 15%, product/ service information: 13%. The Internet is regarded to be the main tool for supporting knowledge management: 17% (Figure 4).

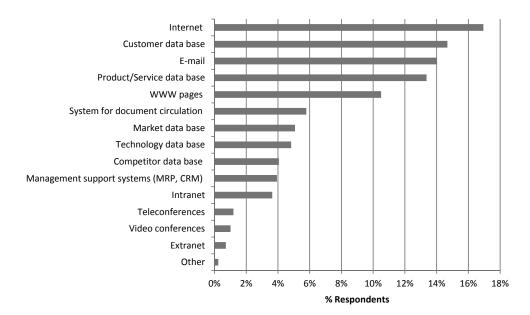


Figure 4. Knowledge management support tools

S o u r c e: Authors' own elaboration.

The research study indicates that Małopolska's companies prefer direct methods of communication with clients (83%). It should be noted that this method is effective when supported by IT systems and data bases. 50% of respondents regard their own data bases to be useful.

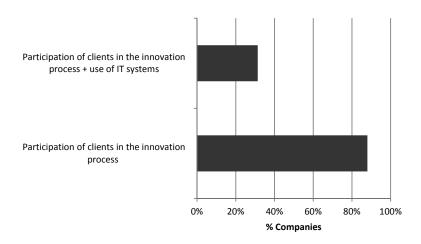


Figure 5. The use of customer relationships and IT systems in the innovation process

Source: Authors' own elaboration.

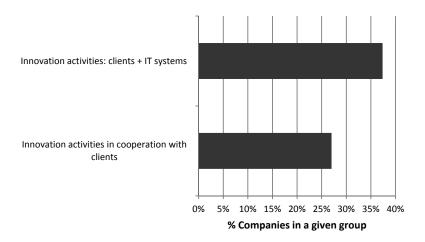


Figure 6. Effectiveness of innovation process based on customer relationships and IT systems

Source: Authors' own elaboration.

The analysis of the use of customer relationship tools indicates that 88% of respondents rely on this form of support in the innovation process. 31% of respondents improve customer relationships with the use of IT systems (Figure 5). From the perspective of the achieved results (implemented innovations) with the use of this support, 27% out of 88% of companies implement innovations (24% of all respondents), while additional IT systems are used by 37% of 31% of companies which declare this additional form of support (9% of the total number respondents; Figure 6).

4. Concluding remarks

Referring to research results, we can confirm the thesis that relationship marketing effectively supports innovation companies. Our results should be treated as a starting point to investigate further, in-depth research undertaken in the field. However, even this limited scope of the research and analysis of the obtained results allows to draw the following conclusions:

- 1. The use of partnership marketing is beneficial for the innovation process and results in developing an innovative product which meets customers' individual expectations.
- The use of IT tools and appropriate management systems (CRM and knowledge management) in partnership marketing increases the effectiveness of innovation process.
- 3. Relationships with customers are more likely to increase innovation capacity of enterprises than their innovative activity.

- 4. Companies apply relationship marketing methods in their innovation processes (88%).
- 5. Companies are aware of the fact that customers are a significant source of knowledge in the innovation process. Moreover, knowledge acquired from clients is valued higher than information obtained from research centres.
- 6. Companies value 'market verified' knowledge—it is more secure for them (keep in mind that among the surveyed companies dominated enterprises SMEs).
- 7. The human factor is leading role in creating innovation.
- 8. In this context, the focus on relationships with customers is especially important for small and medium-sized businesses that have limited financial resources (inter alia in the area of conducting research) in terms of identifying new and costly innovative solutions.
- 9. The level of knowledge management and the use of CRM in the analyzed companies is not satisfactory—the majority of them do not use systemic solutions in this area.
- 10. Customer relationships supported by sophisticated IT systems increase the effectiveness of the innovation process—companies create and implement various innovations.

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Relacje z klientami jako determinanta procesu innowacji w przedsiębiorstwie

S t r e s z e z e n i e: Celem artykułu jest ukazanie związku między stosowaniem przez przedsiębiorstwo specyficznej metody pozyskiwania wiedzy z zewnątrz, to jest kształtowaniem wzajemnie korzystnych relacji z klientami (marketingu relacji), a realizacją przez nie procesu innowacji.

Ideą marketingu relacji i systemu Customer Relationship Management (CRM) jest budowanie długoterminowych więzi z otoczeniem, w szczególności z klientami, w celu zwiększenia dochodowości firmy, a także redukcji kosztów. Stąd też jako główną tezę artykułu przyjęto, że marketing relacji jest efektywnym narzędziem wspierania innowacji przedsiębiorstw. Relacje z klientami (szerzej CRM) pozwalają skutecznie pozyskiwać informacje dla procesu innowacji, zarówno na etapie inwencji innowacji (zwiększają zdolność innowacyjną organizacji), jak i na etapie dyfuzji innowacji (działalności innowacyjnej). Warunkiem skuteczności zindywidualizowanego marketingu są między innymi: bliskie kontakty z klientem, kontrola oraz ciągła analiza ich przebiegu, a także technologia informacyjna i bazy danych.

Wyniki szeroko zakrojonych badań empirycznych pozwoliły na pozytywne zweryfikowanie podanej tezy. Wykorzystanie relacji z klientami jest korzystne dla przebiegu procesu innowacyjnego, a w ostatecznym rachunku prowadzi do zaoferowania klientowi innowacyjnego produktu dopasowanego do jego oczekiwań. Przedsiębiorstwa są świadome tego, że klienci stanowią istotne źródło wiedzy w procesie innowacji, a czynnik ludzki pełni wiodącą rolę w kreowaniu innowacji.

W tym kontekście orientacja na relacje z klientami ma szczególne znaczenie dla małych i średnich firm, które mają ograniczone możliwości finansowe (m.in. w obszarze prowadzenia prac badawczych) w zakresie identyfikowania nowych i kosztownych rozwiązań innowacyjnych.