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## **CUSTOMER KNOWLEDGE MANAGEMENT AS A CATALYST FOR SUCCESS IN A NICHE MARKET**

### **Summary.**

#### **Purpose**

The main cognitive objective of this article is to define the concept of customer knowledge management and knowledge management about customers. Furthermore, the aim is to determine the role of customer knowledge management and knowledge management about customers of companies who are in a niche market. However, the main empirical aim is to define and analyse individual customers' knowledge on selected food products and to identify and analyse their expectations regarding the availability of this knowledge. The aim is also to develop a model of customer knowledge management whose implementation would increase the chances of a company to achieve success in the market.

#### **Design/methodology/approach**

In order to achieve the cognitive aim, the critical-cognitive method was used to study literature in management, marketing, psychology and sociology. However, to achieve the practical aim, the following methods were used: a primary survey conducted among the respondents representing the final buyers (for primary data), statistical analysis (including structural analysis and factor analysis) providing interpretation of results, and comparative analysis to compare the theoretical assumptions with the facts existing on the niche market. The geographical scope of the primary studies covered the entire territory of Poland and the time period was over the year 2011. The study involved over 2,000 respondents from all 16 provinces (in proportion to their population). Finally, 1969 survey questionnaires were used for the analysis.

**Findings**

Among the main conclusions there are the following:

- respondents' information expectations were not met by the sellers, resulting in a low level of knowledge about the analysed niche products;
- the consequence of negligence in meeting the information expectations of customers provides virtually no chance to prepare and implement a program of customer knowledge management, let alone customer knowledge management.

**Originality/value**

The originality of the article is attributed to the choice of customer knowledge management issues, which were shown for the first time to companies operating in the niche market, which in this study is the market for lamb and lamb food products. The empirical value is also apparent from the analysis of the results of the primary research which covered the entire country for the first time. What is also valuable is the creation of a customer knowledge management model that could be implemented not only on this market, but also on other markets of other consumer goods, including niche markets.

**Keywords:** customer knowledge management, niche market

## ZARZĄDZANIE WIEDZĄ KLIENTA JAKO KATALIZATOR SUKCESU NA RYNKU NISZOWYM

**Streszczenie.****Cele**

Głównym celem poznawczym artykułu jest zdefiniowanie koncepcji zarządzania wiedzą klienta i zarządzania wiedzą o kliencie oraz określenie roli zarządzania wiedzą klienta i zarządzania wiedzą o kliencie w działalności rynkowej przedsiębiorstwa funkcjonującego na rynku o charakterze niszowym. Natomiast głównym celem empirycznym jest zidentyfikowanie i analiza poziomu wiedzy odbiorców indy-widualnych dotyczącej wybranych produktów spożywczych oraz zidentyfikowanie i analiza ich oczekiwań związanych z dostępnością tej wiedzy, jak również opracowanie modelu zarządzania wiedzą klientów, którego implementacja zwiększyłaby szanse przedsiębiorstwa na osiągnięcie sukcesu rynkowego.

**Metody/podejście**

Do realizacji celu poznawczego została wykorzystana metoda analizy krytyczno-poznawczej literatury przedmiotu z zakresu zarządzania, marketingu, psychologii i socjologii. Natomiast do realizacji celu praktycznego były wykorzystane następujące metody badawcze: pierwotne badania ankietowe przeprowadzone wśród respondentów reprezentujących nabywców finalnych służące zebraniu danych pierwotnych, analiza statystyczna (w tym analiza strukturalna, analiza czynnikowa) służąca interpretacji uzyskanych wyników, analiza porównawcza służąca porównaniu

założeń teoretycznych ze stanem faktycznym istniejącym na rynku niszowym. Zakres geograficzny badań pierwotnych obejmował obszar całej Polski, a zakres czasowy 2011 rok. Badaniami objęto ponad 2000 respondentów ze wszystkich 16 województw (proporcjonalnie do liczby ich mieszkańców), z czego ostatecznie do analizy wykorzystano 1969 kwestionariuszy ankiety.

### **Wnioski**

Wśród podstawowych wniosków można wymienić:

- oczekiwania informacyjne respondentów nie były spełniane przez oferentów, czego konsekwencją był niski poziom wiedzy badanych na temat analizowanych produktów o charakterze niszowym;
- respondenci byli świadomi dysponowania za małymi zasobami informacyjnymi, wykazując jednocześnie relatywnie dużą otwartość na przyswajanie znacznie większej ilości informacji, których otrzymanie jest warunkiem koniecznym wygenerowania niezbędnej wiedzy;
- oferenci popełniają zatem wyraźne błędy, dopuszczając do wystąpienia luki wiedzy wśród klientów;
- następstwem zaniedbań w zakresie spełniania informacyjnych oczekiwań odbiorców jest praktyczny brak możliwości przygotowania i implementacji programu zarządzania wiedzą o klientach, a tym bardziej zarządzania wiedzą klientów;
- jednym z podstawowych warunków do przeprowadzenia tych działań jest bowiem identyfikowanie oczekiwań nabywców i aktywne ich zaspokajanie, zgodnie z założeniami orientacji marketingowej.

### **Wartość poznawcza/oryginalność**

O oryginalności artykułu decyduje wybór problematyki zarządzania wiedzą klienta, która po raz pierwszy została ukazana w odniesieniu do przedsiębiorstw funkcjonujących na rynku niszowym, jakim jest rynek jagnięciny w Polsce. Wartość merytoryczna artykułu wynika także z analizy rezultatów badań pierwotnych, którymi w odniesieniu do wspomnianego rynku po raz pierwszy objęto całą Polskę oraz stworzenie modelu zarządzania wiedzą klienta, który może zostać poddany implementacji nie tylko na tym rynku, ale także na innych rynkach innych dóbr konsumpcyjnych, w tym niszowych.

**Słowa kluczowe:** zarządzanie wiedzą klienta, rynek niszowy

## **1. Introduction**

One of the basic assumptions of every marketing concept is to meet the expectations of buyers (this also includes employees<sup>1</sup> in a better way than the competitors do. All

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<sup>1</sup> Baruk A.: The Means of Reducing The Divergence Between The Subimages of A Firm As An Employer. "Economics & Competition Policy", No. 7, 2007, p. 105-112; Baruk A.: The role of an employer's image in

orientations belonging to the marketing orientation, ranging from classical orientation to holistic orientation, are based on this assumption.<sup>2</sup>

This requires some identification of the expectations of consumers and their regular monitoring as well as a flexible response to changes of these expectations. Knowing the expectations of buyers does not allow for the use of their knowledge (it is worth noting that some authors distinguished several categories of knowledge: knowledge for customers, knowledge on customers and knowledge from customers.<sup>3</sup> This division is the basis of separation of customer knowledge management and customer knowledge). Identifying customers' expectations makes it possible to gather information on the buyers, which may be knowledge about customers. Its proper use requires the adoption of customer perspective by a company and understanding customer's emotions and some reasons for feeling satisfied.<sup>4</sup>

However, operating on the present day market poses much bigger requirements for sellers. To effectively address the market, knowledge on buyers is no longer sufficient. The aim is to acquire and use buyers' knowledge which can be influenced by the concept of customer knowledge management. It should be emphasized that the implementation of customer knowledge management is not only to acquire and use customers' knowledge, but one of its key effects is to turn passive recipients of knowledge into equal partners, which is highlighted by a number of authors.<sup>5</sup> In practice, of course, it is much harder to gain customers' knowledge than to acquire some knowledge about them, even though this is still a serious problem for many companies not recognizing the importance of marketing or not realizing it.

It is necessary to remember that gaining access to customer's knowledge requires certain conditions from the seller, for example ensuring that buyers trust the seller. The psychological and emotional distance between the customer and the seller prevents the emergence of mutual openness, without which the customers will not want to share their

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activities of contemporary enterprises, [w:] Bizon-Górecka J. (red.): *Ryzyko. Zarządzanie ryzykiem w przedsiębiorstwie*. Wydawnictwo TNOiK, Bydgoszcz 2010, s. 9-21.

<sup>2</sup> Grundey D.: The marketing philosophy and challenges for the new millennium. "Scientific Bulletin – Economic Sciences", Vol. 9, No. 15, 2010, p. 169-180; Baruk A.: Lojalność emocjonalna podstawą długookresowej współpracy oferentów z nabywcami finalnymi. "Handel Wewnętrzny", No. 1, 2011, p. 26-34.

<sup>3</sup> Garcia-Murillo M., Annabi H.: Customer knowledge management, "Journal of the Operational Research Society", Vol. 53, 2002, p. 875-884; Gebert H., Geib M., Kolbe L., Brenner W.: Knowledge-enable customer relationship management: integrating customer relationship management and knowledge management concepts. "Journal of Knowledge Management", Vol. 7, No. 5, 2003, p. 107-123.

<sup>4</sup> Barnes J.G.: *Build Your Customer Strategy: A Guide to Creating Profitable Customer Relationships*. John Wiley and Sons, New York 2006.

<sup>5</sup> Gibbert M., Leibold M., Probst G.: Five styles of customer knowledge management, and how smart companies use them to create value. "European Management Journal", Vol. 20, No. 5, 2002, p. 459-469; Chen T.F., Huang H.F.: An integrated CKVC model to building customer knowledge management synergy and impact on business performance, [in:] *International Conference on Economics, Trade and Development. IPEDR*, IACSIT Press, Singapore 2011, p. 78-82.

knowledge with other market participants, including the sellers. Nevertheless, we should not forget that acquisition of customers' knowledge is not sufficient to effectively meet their expectations.

This knowledge must be properly used in the common objectives of buyers and sellers. However, this can be made possible thanks to the previously mentioned implementation of customer knowledge management. The starting point for the implementation of this concept is to have and use the current knowledge about the customers and customer knowledge management (T.H. Davenport, among others, follows the approach to knowledge about customers as a starting point for creating a mutually beneficial relationship.<sup>6</sup> Only then we can make a successful attempt to establish a partnership based on mutual trust which is beneficial for both parties. Building a genuine partnership with buyers is almost impossible without the implementation of knowledge management, which affects the effective management of mutual relations.<sup>7</sup> Thanks to the cooperation between buyers and sellers, it is possible to create new knowledge based on some knowledge which each partner already has.<sup>8</sup> At the same time, the buyers begin to fulfil the role of the so-called knowledge partners.<sup>9</sup>

The effective management of both customer's knowledge and knowledge on customers plays an important role when it comes to niche markets, such as the lamb market in Poland. At this point, it is still difficult to have access to information from or on final buyers who also know very little about lamb products. They do not know its basic characteristics and do not realize the benefits that could be gained by buying lamb meat and lamb products. Consequently, the lamb sellers (including restaurant owners) have a big challenge in developing comprehensive activities in the education of potential customers. Meeting such a challenge would create a community of loyal customers. The shaping of their knowledge and the creation of market awareness by the sellers would positively contribute to building and consolidating mutual ties based on openness and positive emotions. However, this requires sellers' openness to learning and applying new solutions, which include the previously mentioned concepts of management. Of course, developing and establishing a system of management of knowledge on customers and the system of management of customers' knowledge should be preceded by the development and creation of a marketing information system (Polish: SIM), which then would be incorporated into two previously

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<sup>6</sup> Davenport T.H., Harris J.G., Kohli A.K.: How do they know their customers so well?. "Sloan Management Review", Vol. 42, No. 2, 2001, p. 63-73.

<sup>7</sup> Madhoushi M., Saghari F., Madhoushi Z.: Survey of Customer Knowledge Management Impact on Customer Relationship Management. "International Journal of Business and Social Science", Vol. 2, No. 20, 2011, p. 215-226.

<sup>8</sup> Chen T.F., Huang H.F.: op.cit.

<sup>9</sup> Chen T.F.: An Integrated Process – based Customer Knowledge Management Model. "Journal of Knowledge Management Practise", Vol. 12, No. 4, 2011.

mentioned systems. One of the key elements of the SIM is the final buyer and his expectations.<sup>10</sup>

Therefore, the primary aim of this paper is to identify and analyze the level of knowledge of individual customers for lamb and lamb products as well as the associated expectations. In order to achieve this aim, an initial survey was carried out. It included respondents representing the current and potential final buyers of lamb. The study was carried out in 2011 throughout Poland and it was based on the survey method. After eliminating questionnaires which had been completed wrong, 1969 survey questionnaires were chosen for the analysis. When analyzing the results of the primary research, structural and statistical methods were used, including factor analysis. In this article, factor analysis was used to reduce the number of variables affecting the studied categories (causes of eating and not eating lamb and lamb products) and to detect internal interdependence in the relationships between these variables. Reducing the subset of input variables led to its replacement by a new variable. The first step in creating a factorial model was building a correlation matrix between original variables and its preliminary analysis whose results were important to further procedures for the use of algorithms for identifying the hidden factors. If the correlation coefficients between variables were low ( $<0,3$ ), it was necessary to refrain from further proceedings. However, if the original correlation matrix of variables was suitable for the application of factor analysis, it was necessary to determine how to identify the factors and choose a factorial model. To extract some factors, the principal component method was used.<sup>11</sup>

To determine the number of common factors, (principal components) the Kaiser criterion method was used. The method is based on the one given at the following link: <http://www.statsoft.pl/textbook/stfacan.html# index>, allowing only those factors that have eigenvalues<sup>12</sup> greater than 1 to be considered for study. Each factor explains a certain level of variability of the total system under consideration. Moreover, every factor has a associated percentage of variance which can be interpreted as a measure to indicate the relative weight of each factor. At this stage, a separate correlation matrix is created and it is called factor loadings. They express the degree of saturation of a given variable with a factor and are, for uncorrelated factors, correlation coefficients of the original variable with the individual factors. The greater the correlation coefficient of the variable factor is, the more significant

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<sup>10</sup> Shaker T.I.: The role of marketing information system on decision making. "International Journal of Business and Social Science", Vol. 2, No. 3, 2011, p. 175-185.

<sup>11</sup> Sokołowski A., Sagan A.: Przykłady stosowania analizy danych w marketingu i badaniu opinii publicznej. [www.statsoft.pl/czytelnia/marketing/adwmarketingu.html#wymiarowosci](http://www.statsoft.pl/czytelnia/marketing/adwmarketingu.html#wymiarowosci), 2 February 2012.

was the variable for a given factor. Next, the obtained factor loadings were subjected to the rotation technique. The rotation of factors was carried out using the standardized varimax method, which by maximizing the variance provides for transparency and facilitates the interpretation of the results needed to explain the factor.<sup>13</sup> The rotation does not change the relative coordinates of point positions, but rotating the axis of reference ensures the appropriate value of loadings. In the final stage of the analysis, the value of the loadings were referenced to the factors and individual variables. This required the separation of variables with the highest factorial loadings relative to the pathogens (approximately > 0,7) and finding, through the analysis of variable names, their common reference to a deeper dimension.

## 2. The level of respondents' knowledge on lamb

The lamb market in Poland is a niche market. Sale and consumption of the products are formed at a very low level (participation in the overall consumption of lamb meat in Poland is seven times smaller than for the European Union, which is 700 g per year per capita. It is worth noting that in Germany, it is even at a higher level, as it is 1,1 kg per capita. Of course, the low lamb consumption has a direct impact on a very limited level of its purchases,<sup>14</sup> due to various reasons. One of them is certainly the final buyers' limited knowledge on these products and the benefits to be gained through their inclusion in the diet. However, while a significant number of sellers still think it is easier to shape some attitudes and behaviour of consumers who have little knowledge about the products offered, in practice this is completely different. A definitely better situation for both parties is when buyers have current and sufficient knowledge on the offer and its suppliers.

It is possible to say that sellers, to a large extent, are responsible for the level of market awareness of customers and their knowledge. Only those who are aware of the laws governing the market and their own market, as well as the properties of the products sent to them, may be genuine partners for businesses, including producers and retailers taking part in the development of the market offer in accordance with their expectations and interests. Therefore, what the sellers should take into account are the strategic objectives of marketing efforts, related to the education of the market, created for the final end use of their value,

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<sup>12</sup> All of the original variables have been standardized, which means that their variances were equal to unity. The new variable should explain the maximum variance of the original variables. The variance of this new variable explaining a certain amount of variability of the primary variables is called the eigenvalue.

<sup>13</sup> Sokołowski A., Sagan A.: op.cit.

<sup>14</sup> Klepacki B., Rokicki T.: Na zdrowie, [www.farmer.pl/produkcja-zwierzeca/owce-i-kozy/na-zdrowie,334.html](http://www.farmer.pl/produkcja-zwierzeca/owce-i-kozy/na-zdrowie,334.html), 8 July 2011.

including products. This means giving special consideration to marketing attributes relating to packaging the product and its branding.<sup>15</sup>

Educating buyers should be treated as an investment representing an initial step in the process of managing customer knowledge without which, as already mentioned, is difficult to talk about customer knowledge management. It is especially important in markets where the life cycle is only just beginning (some authors even claim that Poland still does not exist on the lamb market<sup>16</sup> because it has been an undeveloped niche so far.) It is difficult to expect customers to buy products which they know little or nothing about, or who have wrong misconceptions due to stereotypes. This is true even when the products are characterized by very advantageous health qualities. Buyers and consumers need to know about these beneficial qualities and understand their meaning (distinguishing buyers and consumers as separate categories is consciously done and deliberate because they reflect the different roles of the public market, indicating whether a person buys a product, or uses it<sup>17</sup> Only then they can be effectively made to buy a particular product or a category of products.

Unfortunately, according to the analysis of the study's results, the Polish know little about lamb and lamb products, which makes it difficult to improve the development of the lamb market in Poland. It also shows the mistake made by the sellers, and thus the need to change their current approach. It turns out that some respondents do not even have basic knowledge on lamb. Among the respondents, there was a certain percentage of people who do not know which animal lamb comes from (table 1), but it was much more clearly visible in the group of respondents being under 25. As many as 11% of them indicated an incorrect response, believing that the lamb is a young cow (7% of responses) or goat (4% of responses). Admittedly, the inclusion of the entire population indicates a higher level of knowledge on this subject, but also among all respondents, regardless of their age, 4% were not able to give the correct answer to the question about the biological origin of the lamb. On this basis it can be stated that the sellers face a considerable challenge because the scope of the educational campaign they should prepare and implement must be very large.

Table 1

Respondents' knowledge on the biological origin of the lamb (%)

What animal does the lamb come from?	Answers (%)	
	Respondents in total	Respondents under 25
Sheep	96	89
Chamois	2	4

<sup>15</sup> Baruk A.: Jak skutecznie oddziaływać na odbiorców? Wybrane formy sprzedaży i wywierania wpływu na nabywców. Dom Organizatora, Toruń 2006.

<sup>16</sup> Klepacki B., Rokicki T.: op.cit.

<sup>17</sup> Baruk A.: Jak skutecznie oddziaływać na odbiorców? Wybrane formy sprzedaży i wywierania wpływu na nabywców. Dom Organizatora, Toruń 2006.

Cow	1	7
Mouflon	1	0
Pig	0	0
Fallow deer	0	0

Source: own study based on the results of the research.

As it is clear from the study, most respondents did not know the country of origin of lamb ordered in a restaurant nor of that purchased in a store. However, a significant number of respondents believed this knowledge to be important. Nearly nine tenths of respondents did not know which country lamb served in restaurants originated from while the respondents under 25 had no knowledge on this subject at all (table 2).

Table 2

Respondents' knowledge on the geographical origin of the lamb (%)

The country of origin	Answers (%)	
	Respondents in total	Respondents under 25
Yes	11	0
No	89	100

Source: own study based on the results of the research.

This reflects the presence of an evident gap of knowledge because 65% of all respondents stated that the country of origin of lamb ordered in restaurants is at least important, while for 43% of people the importance of such knowledge was very high (table 3). Only for 7% of respondents, the knowledge plays a minor role.

Table 3

The importance attached by all the respondents to knowledge of the geographical origin of lamb ordered in restaurants (%)

The importance attached by the respondents	Answers (%)
Very high	43
High	22
Little	14
Very little	7
Difficult to say	14

Source: own study based on the results of the research.

The situation is slightly better when it comes to knowledge of country of origin of lamb purchased in stores because 53% of all respondents did not know the country of origin (table 4). However, among respondents under 25, once again nobody knew the correct answer.

Table 4

Respondents' knowledge on the geographical origin of lamb bought in shops (%)

The country of origin	Answers (%)	
	Respondents in total	Respondents under 25
Yes	47	0
No	53	100

Source: own study based on the results of the research.

Perhaps a slightly higher level of knowledge on the country of origin of lamb purchased in stores is due to the fact that this knowledge was more important for them than – for those respondents who ordered lamb in restaurants. It turns out that, according to 73% of respondents, it was at least important, and for 44% of them, its significance was very high (table 5). Therefore, they could be much more active in the independent acquisition of this knowledge, without waiting for an initiative on the part of sellers. We can also assume that indicating respondents' own homes as places where they usually eat lamb (45% of all responses, compared with 22% of responses where the consumption of lamb is usually in restaurants) was not due to the fact that it was less expensive, but also because of the knowledge of its origin.

Table 5

The importance attached by all the respondents to knowledge of the geographical origin of lamb ordered in restaurants (%)

The importance attached by the respondents	Answers (%)
Very high	44
High	29
Little	11
Very little	4
Difficult to say	12

Source: own study based on the results of the research.

Furthermore, the respondents also had no knowledge of the characteristic properties of lamb meat. Among those representing the age group up to 25 years of age, over ¼ of respondents perceived lamb as having bad characteristics (table 6). As many as 28% of respondents felt that lamb is hard to digest while 26% of people were convinced that it is high-calorie. Nevertheless, most respondents knew the actual properties of this meat, but a significant proportion of incorrect answers confirms the significant knowledge gaps associated with lamb while pointing to negligence in this regard on the part of sellers who do not seek to carry out efforts aimed at educating their customers, and do not implement customer knowledge management. The confirmation of this conclusion is the results of research on the expectations of respondents to the scope and sources of information coming to them (they will be discussed later in this article), which also show that sellers do not use customer knowledge management. To some extent this may explain the lack of implementation of customer knowledge management because, as mentioned in the introduction, it requires some current knowledge of the buyers.

Table 6

Knowledge of respondents under 25 on the properties of lamb (%).

Properties of lamb	Answers (%)
Calories:	
Low-calorie	74
High-calorie	26
Digestibility:	
Light	72
Heavy	28

Source: own study based on the results of the research.

### 3. The level of respondents' knowledge on lamb and their market behaviour

Effective management of customer's knowledge and knowledge about customers on a niche market, as in the case of Poland's lamb market, requires the sellers to identify the reasons why the buyers eat (or do not eat) lamb and lamb products. Therefore, there was an initial survey attempting to identify the key factors that made respondents eat lamb meat products. When it comes to some respondents who had never consumed them, it was asked what the reason was. For this purpose, a statistical method of factor analysis was used. It can reduce the number of variables which constitute the primary data obtained from surveys and identify relationships between these variables.

Respondents declaring eating lamb and lamb products were presented with a set of causes (factors) that had led them to do so and asked to give them specific ratings on a scale of 1 to 5 (1 – unimportant factor, 2 – factor of little importance, 3 – factor of average importance, 4 – important factor, 5 – key factor).

Factors influencing the willingness of respondents to eat lamb formed three areas (principal components). Figure 1 presents the plot of eigenvalues for these variables while table 7 presents the results of factor analysis in the form of the factor loadings and their interpretation revealing the factors include the principal component.

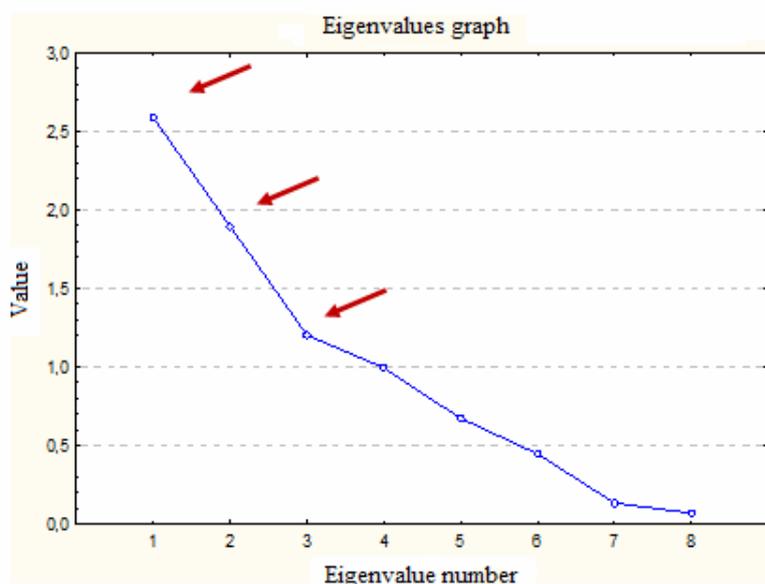


Fig. 1. Eigenvalues of variables determining the causes of eating lamb and lamb products among the respondents

Rys. 1. Wartości własne zmiennych określających przyczyny jedzenia baraniny i jej produktów wśród respondentów

Source: own study based on the results of the research.

Table 7

Interpretation of principal components obtained for the group of variables determining the causes of eating lamb and its products in the opinions of respondents

Principal components	Variables	Loadings value	Eigenvalue of the principal component	Eigenvalues (%)	Eigenvalues accumulated (%)
<b>(Promotional campaigns for lamb)</b>	➤ <b>following the fashion</b>	- 0,754	2,587836	32,35	32,34795
	➤ <b>imitating famous people</b>	- 0,722			
	➤ <b>willingness to stand out among the others</b>	- 0,784			
<b>(Diet)</b>	➤ <b>willingness to add variety to a diet</b>	- 0,925	1,896002	23,70	56,04797
<b>(Nutritional value of lamb)</b>	➤ <b>nutritional values</b>	0,891	1,201491	15,02	71,06661

Source: own study based on the results of the research.

As a result, three principal components were distinguished. They explain 71,06% of the total variation, which means that there were three groups of factors affecting the desire to eat lamb and lamb products by the respondents, and together these three main factors accounted for 70% of the reasons for desiring lamb.

The first principal component explains 32,35% of the variation representing the area containing the three factor loadings with a strong negative correlation, which are associated with features such as: following the fashion, imitating famous people and a willingness to stand out among the others. This means that the low level of lamb consumption among the respondents is primarily due to the lack of fashion for consumption of such products, and the desire to stand out in this respect from other people and the lack of action by suppliers of promotional campaigns supported by well-known people. Lamb is not as popular in Poland as pork, poultry or beef.

The second principal component represents a factorial loading of a very strong negative correlation, related to the variable of willingness to vary the diet, but this component explains 23,70% of the total variation. The third principal component, which explains 15,02% of the total variation, is associated with very high and positive factorial loading on the nutritional value of lamb.

Additionally, we can conclude that the low level of consumption of lamb meat and its products resulted from a lack of respondents willingness to vary their diets. The main feature which made the respondents consume this kind of meat was a high awareness of the nutritional value of lamb.

According to the results of factor analysis, we can also see a high positive value of the factor loading associated with the taste of lamb dishes. The value of the factor loading (0,690) did not exceed the typical value of qualifying for the factor analysis equal to or greater than 0,7. This means that the flavour of lamb dishes were viewed positively by respondents, but the predominant feature was the conviction of high nutritional value of meat.

Respondents who declared that they had never eaten lamb meat products before were also presented with a set of causes (factors) that contributed to this situation and asked to give them specific ratings on a scale of 1 to 5 (1 – unimportant factor, 2 – factor of little importance, 3 – factor of average importance, 4 – important factor, 5 – key factor). These factors, in this case, established four areas (principal components). Figure 2 presents the plot of eigenvalues for these variables while Table 8 presents the results of factor analysis in the form of the factor loadings and their interpretation revealing the factors that include the principal component.

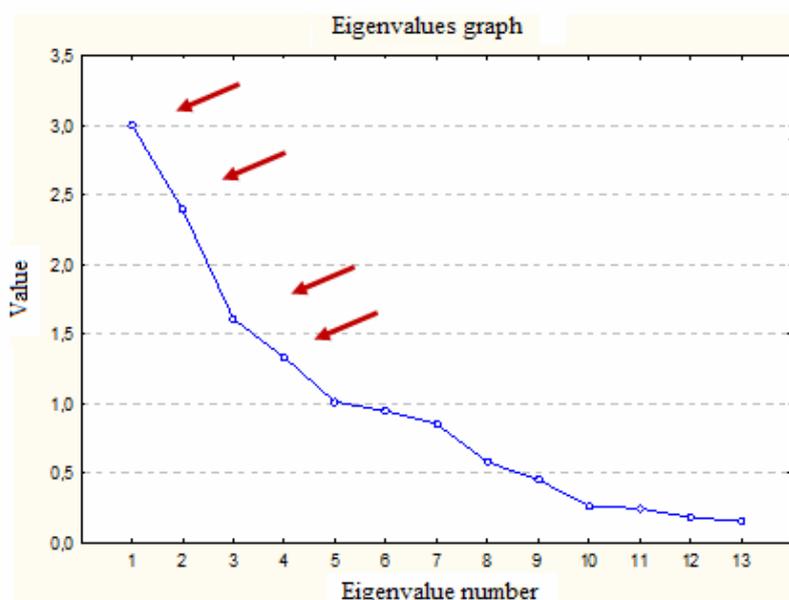


Fig. 2. Eigenvalues of variables determining the cause of not eating lamb and lamb products by the respondents

Rys. 2. Wartości własne zmiennych określających przyczyny niejedzenia baraniny i jej produktów wśród respondentów

Source: own study based on the results of the research.

Table 8

Interpretation of principal components obtained for the group of variables determining the cause of not eating lamb and its products in the opinions of respondents.

Principal components	Variables	Loadings value	Eigenvalue of the principal component	Eigenvalues (%)	Eigenvalues accumulated (%)
(Opinions on lamb)	➤ Unfavourable opinions of friends on the taste of lamb	0,851	3,001469	23,09	23,08822
	➤ Unfavourable opinions of papers on the taste of lamb	0,917			
	➤ Unfavourable opinion on the internet on the taste of lamb	0,914			
(Knowledge on lamb)	➤ Lack of knowledge on lamb availability	0,808	2,391547	18,40	41,48473
	➤ Lack of knowledge on nutritional values	0,874			
(Lamb availability)	➤ Limited availability of lamb in shops	0,834	1,605388	12,35	53,83387
	➤ Limited availability of lamb in restaurants	0,750			

Source: own study based on the results of the research.

The four principal components explained 64,07% of the total variation, which means that there were four groups of factors affecting not eating lamb and lamb products by the respondents while the fourth component did not include a factor for which the factorial loading value would exceed the qualification value for the factor analysis equal to or greater than 0,7. Therefore, this component was not taken into account in further considerations.

On the basis of interpretation of the factor analysis results for the first principal component, it can be concluded that the primary reason affecting the reluctance to eat lamb and its products among the respondents were uncomplimentary opinions on the taste of lamb coming from friends and showing up in news reports or internet sources. This component explains up to 23,08% of the total variability of the studied phenomenon.

The second and the third principal component, which respectively explain 18,40% and 12,35% of the total variability of the studied phenomenon, are associated with the characteristics on respondents' knowledge about lamb and its availability. It turned out that the respondents, as final buyers who had never eaten lamb, did not have sufficient knowledge about its availability, both in shops and restaurants. The reason affecting the reluctance to consume this kind of meat and meat products was also lack of knowledge of respondents about the nutritional value of lamb, which confirms the previously formulated assumptions. This is even more important because this factor, as it is apparent from the previous analyses, was a key element in encouraging its consumption. Respondents' reluctance to eating lamb and lamb products explained the existence of significant problems with making the purchase, mainly because of the lack of availability of lamb meat in retail outlets.

#### **4. Respondents' expectations related to building their knowledge on lamb by the sellers**

The study showed that the expectations of respondents regarding the number and scope of information on lamb remained largely unfulfilled. Respondents also felt unsatisfied with insufficient knowledge provided by the media, indicating that more information should be transmitted to broaden knowledge on lamb. As it is shown in table 9, regardless of age of respondents, according to the vast majority of them, the amount of information on lamb provided by the sellers was too small. In total, 69% of the total respondents thought in this way and so did 65% respondents under 25 years of age. Moreover, in this age group, there was no person who thought the media covered enough information. However, among all respondents there were only 2% of people expressing otherwise. In total, only one in ten respondents indicated that the information on lamb is as at least satisfactory, and among young respondents there was only a slightly greater proportion for the same opinion.

Admittedly, more than 1/5 of respondents (both respondents in total and respondents under 25) could not clearly express an opinion on this subject, but based on the answers of other respondents who indicated insufficient or definitely insufficient, it can be said that their expectations regarding the amount of information they should receive from the sellers were not met. This confirms the earlier conclusion of the clearly visible dysfunction in communication between the sellers and their customers, which makes it practically impossible to implement customer knowledge management.

Table 9

Respondents' opinions regarding the amount of information about lamb provided by the sellers in the media (%)

Respondents' opinions	Answers (%)	
	Respondents in total	Respondents under 25
Definitely sufficient	2	0
Sufficient	8	13
Difficult to say	21	22
Insufficient	34	37
Definitely insufficient	35	28

Source: own study based on the results of the research.

Respondents' expectations regarding the scope of the information on lamb were much larger in comparison with what was provided by the sellers. However, it is possible to notice that some deficiency in this respect was mainly felt by the young. For this age group, two subject areas were mentioned by more than a half of respondents. While for total respondents, no single subject area was mentioned by more than 50% of respondents (table 10). Depending on the age of the respondents, we can also see a different structure of unmet expectations about the scope of the information on lamb, although the representatives of the two analyzed groups most often pointed to the need to increase the amount of information about

the nutritional value of lamb (49% and 63% of responses). This indicates a greater awareness of the respondents in this field. This is even more important because, as the factor analysis, lack of knowledge about the nutritional value determined the lack of eating lamb.

A subject area that is relatively less important for both age groups is the country and region of origin. It should be noted that in the case of people under 25 years, the country of lamb origin (7%) is the smallest subject area. When it comes to respondents in total, the region of lamb origin (4%) is the smallest subject area.

Table 10

Respondents' expectations regarding the scope of information on lamb provided by the sellers in the media (%)

The scope of information	Answers (%)		Place (Rank)	
	Respondents in total	Respondents under 25	Respondents in total	Respondents under 25
Taste	38	41	3	4
Availability on the market	14	35	5	5
Nutritional values	49	63	1	1
Preparation	41	48	2	3
Country of origin	7	7	6	7
Region of origin	4	9	7	6
Diet	19	54	4	2
Other	1	3	8	8

Source: own study based on the results of the research.

Some clear differences are seen in relation to expectations relating to the dissemination of information about the importance of lamb in the human diet. In the group of 25-year-olds, lack the information in this area accounted for 54% of people (the second position among all the analyzed subject areas) while among all respondents, this area was mentioned by almost three times smaller proportion of people (19%), taking only the fourth place. A Large difference also occurred in the case of information relating to the availability of lamb on the market. In this subject area, expectations of information are twice as important for young respondents in comparison with total respondents, although this area occupies the fifth place (rank) for both groups.

## 5. Conclusion

Based on previous considerations, it can be stated that the information needs of the respondents were not met by the sellers. The consequence was a low level of knowledge of respondents about lamb. Of course, a positive point to note is that respondents were aware of the few resources of information at their disposal while demonstrating openness to the gaining large amounts of information, which is a necessary condition to obtaining the necessary knowledge. It does not change the fact that sellers are committing clear mistakes in accepting the gaps of knowledge among consumers rather than taking coherent and comprehensive action to create this knowledge.

The open attitude of respondents to the acquisition of knowledge concerning the little-known products would help the sellers realize the previously mentioned matters. However, not making use and benefitting from this attitude demonstrates some negative attitude of the sellers. In this way, the sellers are inconsistent with the orientations belonging to a group of marketing orientation. A negative consequence of negligence in meeting the information needs of recipients provides virtually no chance to prepare and implement management of customer's knowledge and knowledge on customers as well. One of the basic conditions for carrying out these actions is the identification of the expectations of buyers and satisfying them, according to the sequence of actions in terms of the model presented in figure 3.

We can conclude that there is a great challenge for the sellers who could potentially fill a niche on the market. Positive results would lead to generating new knowledge. Its use would be beneficial for both parties, facilitating their partnership in creating a market offer based on shared knowledge, thus allowing the seller to use their commercial success to lead to further creation of new knowledge, which many authors define as the most important resource of the twenty-first century.<sup>18</sup>

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<sup>18</sup> Drucker P.F.: Knowledge Worker Productivity – The Biggest Challenge. “California Management Review”, Vol. 2, No. 41, 1999, p. 79-94.

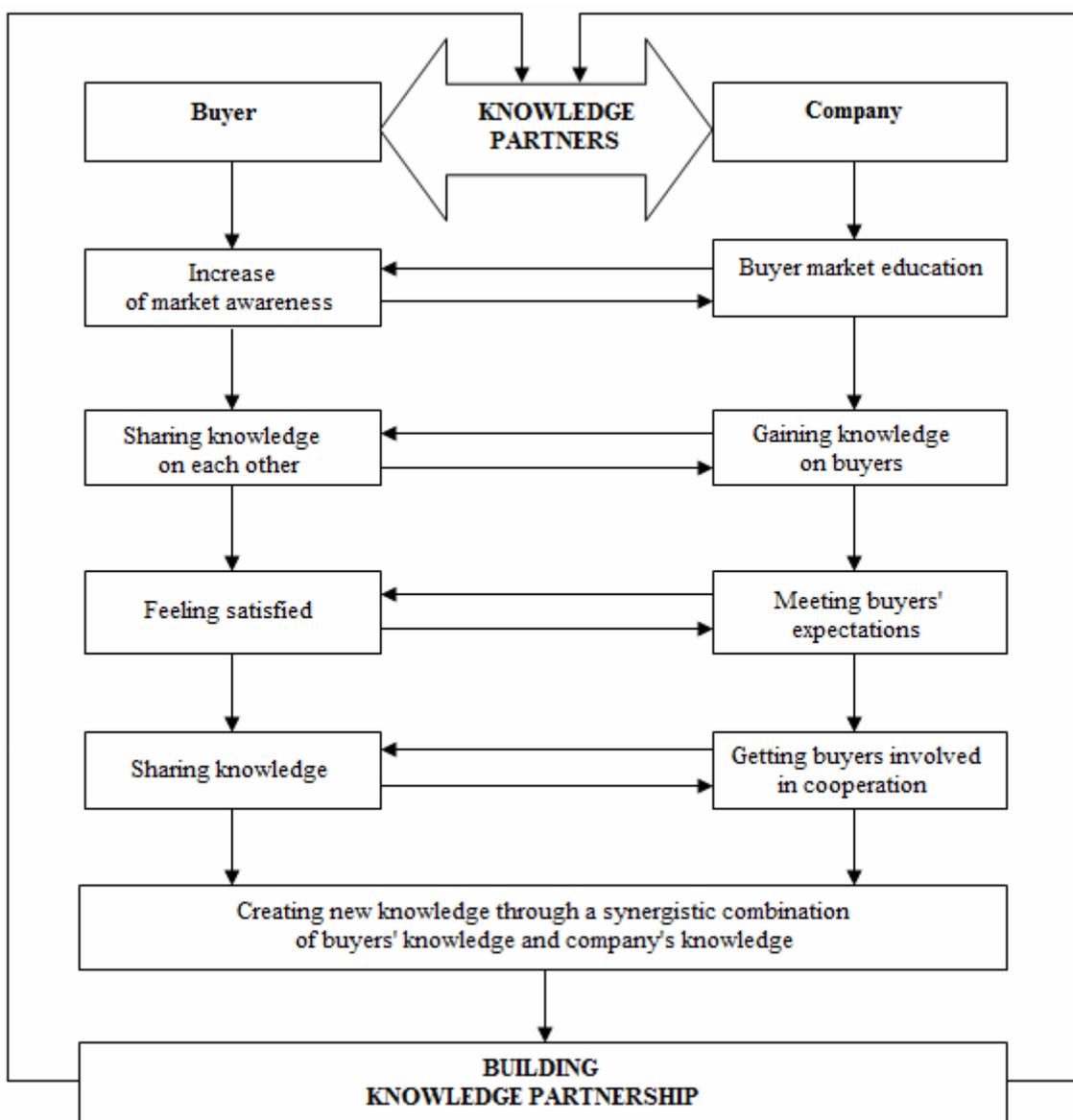


Fig. 3. Model presentation of customer knowledge management in the context of building knowledge partnership

Rys. 3. Przedstawienie modelu zarządzania wiedzą klienta w kontekście partnerstwa budowania wiedzy

Source: own study.

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