Consumers' Behavior in Decision-Making in Foodstuff Purchasing Process

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Abstract The purpose of this research is developing of model of market segmentation for food consumers, as well as determination the extent of influence of various factors influencing the behavior of the Latvian consumers while making the decision on purchase of these goods. In the course of the research approaches to market segmentation of food products consumers were used, as well as statistical data for Latvian food product market, described in literature, also the results of empirical researches. As a result the model of market segmentation for food consumers was developed, the extent of influence of various factors influencing the behavior of the Latvian consumers was determined based on the correlation analysis. The results of the research let the authors to make conclusion and develop recommendations for producers and sellers of food products for possible effective marketing impact on the Latvian food product consumers. The results of the research have as well as theoretical as practical meaning not only for Latvian market subjects, but also for food product market subjects in other countries.

Keywords Purchase · Consumer · Foodstuff · Consumers' behavior · Market segmentation

1 Introduction

Food products are an integral component of consumption for each person; it is the need that a person will always satisfy first. Companies make their offer directly based on consumer's demand for food products. In Latvian food industry competition of similar products dominates; in particular, saturation of offers is peculiar for

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the sector which causes additional difficulties in attracting consumer attention to a particular product. Nowadays one of the main tasks of the company and marketing is the consumer himself, researching and analyzing their needs and problems. The companies need to segment the market as precisely as possible, to analyze consumer's decision-making process, and, based on that, it is possible to outstand from the saturated environment of equivalent products.

The purpose of this research is developing of model of market segmentation for food consumers, as well as determination the extent of influence of various factors influencing the behavior of the Latvian consumers while making the decision on purchase of these goods. The following hypotheses have been put forward in the study: (1) in foodstuff category, meat processing products are the most demanded ones; (2) there is a is a statistically significant correlation between consumers' marital status foodstuff purchase decision-making; (3) there is a statistically significant correlation between consumers' incomes and foodstuff purchase decision-making.

Based on the stipulated objectives and hypotheses, the authors have set the following tasks:

1. To analyze the components, influencing consumer behavior and purchasing decision-making process, based on academic and specialized literature.
2. To research and analyze the consumer food products purchasing habits; to determine food product market segmentation model; to investigate consumer behavior affecting factors and consumer behavior in purchasing decision-making process.
3. To conduct an interrogation of Latvian population on the impact of sales promotion on the perception of the consumer and purchasing decision-making process.
4. To confirm or reject the proposed hypotheses as well as to draw conclusions and proposals, based on the research results.

As research methods of the study mainly primary and secondary data collection methods are used, as well as theoretical literature analysis, secondary data analysis and investigation. The quantitative method of primary data collection is questioning.

2 Foodstuff Market Segmentation Model

Marketing concept evolution is in line with market development trends and performance orientation change. Today's market is characterized by close interaction between the actors that appears in the form of efficient communication, information exchange and co-ordination of activities in order to achieve mutually beneficial objectives. Therefore, a relatively new marketing concept is developing—*Relationship Marketing*, that is widely described in literature (Berry et al. 1983; Webster et al. 2005; Kotler et al. 2011) and is applicable in practice (Kracklauer et al. 2004). Based on the literature, we have concluded that *Relationship Marketing* is establishing, retention and development of company's relationship and continuous

performance, coordinated with suppliers, customers, and other market actors in order to achieve mutually beneficial objectives. *Relationship Marketing* is consumer-oriented marketing, where a significant part of decision-making on marketing mix components (product, price, place and promotion) is passed to the consumer and he or she is involved in cooperation with companies (especially through websites). The difficulties, related to implementing a relationship marketing strategy within a retail context are noted by Pressey and Mathews (2000). The necessity of meaningful relationship with the consumers was emphasized in the researches by Gummesson (2002), Hougaard and Bjerre (2002). According to Gummesson (2002), relationship marketing is a marketing based on Interaction with networks of relationship. The authors of the article agree that relationship marketing is the base of consumer's behavior, including decision-making process is buying foodstuff. So, relationship marketing is focused on long-term cooperation between companies and consumers. Consequently, the objective is to offer long-term values to the customers and to satisfy their needs in long-term. Therefore, relationship marketing requires from all company units coordinated marketing activities in customer service.

Summarizing the opinions of the authors of literature on consumer relations development (Webster et al. 2005; Bruhn 2003; Ackfeldt and Wong 2006), we come to the conclusion that it is reasonably to highlight the following levels of consumer relations:

– Basic level: the companies sell products, but do not care about long-term communication with the consumers,
– Unilateral reaction level: the companies sell products and suggest to the consumers to notify about all questions that arise in product consumption process,
– Bilateral reaction level: the companies sell products and then carry out a dialogue with the consumers, express their interest in the complaints, problems and choices and react to them,
– Active communication level: the companies sell products and then maintain active communication with the consumers, related to existing and new products, including problems, development opportunities, etc.
– Partnership level: the company not only sells products, but also involves the consumers in product development and the sales process in order to increase the value of products, using internet marketing and other interactive opportunities.

A gradual transition from a lower to a higher level means the improvement of *relationship marketing*. According to Praude (2011), Praude and Šalkovska (2015), relationship marketing requires a well-grounded market segmentation, which in essence is market segmentation by groups of consumers according to their needs, performance in the market and attitude towards marketing activities. Namely, market segmentation is the base for defining the target market (the company need to cooperate with and to and satisfy their needs). Market segmentation process, including its methods, principles and criteria, is widely described in literature (Kotlers and Keller 2006; Dibb and Simkin 1996; Best 2005). However, in the opinion of the authors of the article, when offering a complex of segmentation criteria (demographic, social, economic, psychological, etc.) we do not sufficiently address to

practical recommendations for the company, such as what criteria preference should be given to in a particular situation, taking into account the characteristics of the product/brand/company/market. It should also be noted that only segmentation techniques from company's standpoint are suggested in in theory and used in practice, that is to say, the manufacturer/trader segments the market in order to attract consumers for already offered products. *Relationship Marketing* is intended to make market segmentation to adapt to the needs of consumers in the process of interaction.

We investigated consumers' behavior in foodstuff purchasing process. In order to reveal market segmentation and consumers' choice criteria, a pilot study initially has been carried out. For this purpose, in 2015, a discussion within a focus group was organized and an interrogation of experts was conducted. The focus group consisted of 60 Latvian foodstuff consumers. In the beginning of 2016, food manufacturers and sales representatives, as well as marketing specialists (a total of ten people) were involved in experts' interrogation where they responded to the questions of the authors of the article in written. Summarizing the results of the discussion and the expertize, the researchers have concluded:

1. in market segmentation aspect the companies have a distinct emphasis on demographic (gender and age), social (marital status) and economic (income) criteria;
2. trading companies are additionally recommended to take into account consumers' behavior in purchasing process, that is, their habits (to make/not to make a purchase list), planned/unplanned purchase portion, and purchase frequency;
3. Eight bestsellers in foodstuff category have been highlighted (Table 4);
4. foodstuff purchase determining factors from consumer's standpoint have been ranged (Table 5).

Based on the analysis of literature and the pilot study, the authors of the article have developed a market segmentation model according to *Relationship Marketing* concept (Fig. 1). A foodstuff market segmentation model, organized according to relationship marketing concept, has been proposed. It means that, unlike traditional approach, market segmentation is based on consumer's needs. Only after these needs are revealed, one can define which demographic, social and other characteristics distinguish a specific target audience from another target audience with different needs.

We have carried out an empirical research based on the model developed (Fig. 1), putting forward the following hypotheses (H):

H1—in foodstuff category, meat processing products are the most demanded ones;
H2—there is a is a statistically significant correlation between consumers' marital status foodstuff purchase decision-making;
H3—there is a statistically significant correlation between consumers' incomes and foodstuff purchase decision-making.

The objective of the empirical research was to verify the hypothesis H1–H3, that is, to approve/partially approve/reject them.
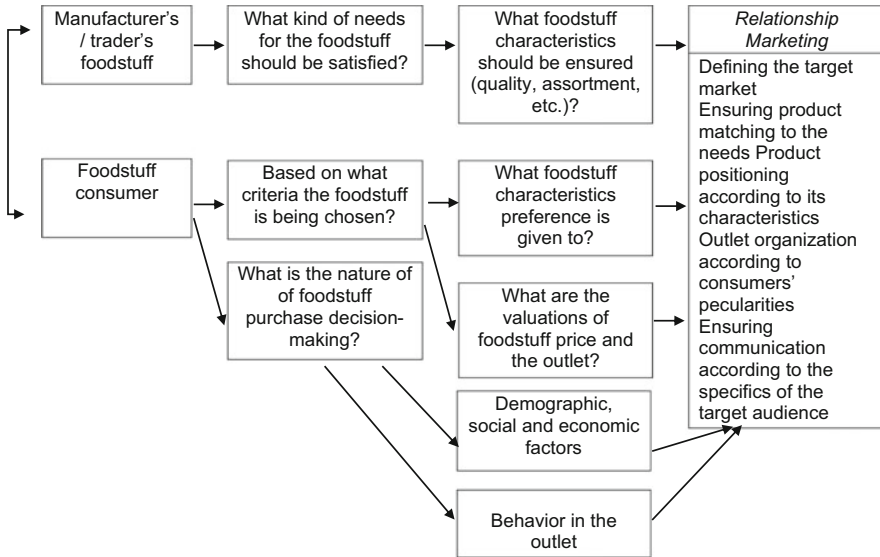
Fig. 1 Foodstuff market segmentation according to Relationship Marketing concept. Source: Developed by the authors based on Best (2005) and Kotler et al. (2011)

3 Methodological Grounds and Data of the Empirical Research

We have chosen consumers' interrogation as the empirical research method. Interrogation is an integral part of quantitative research methods and structured data collection method based on the gathering of information about individuals, groups of people and/or organizations. According to Neuman (2007), interrogation is based on a set of questions, as the result of which the researcher can obtain primary data on respondent's' convictions, attitude, behavior, thoughts, knowledge and expectations in the given researched area. In the opinion of the authors of the article, namely by means of interrogation it is possible to achieve the objective of the investigation and to verify the suggested hypotheses. In scope of the research, an individual electronic distance written interrogation of respondents has been conducted, using a variety of forums—recipes, beauty, handicrafts, family and child care, auto enthusiast, sports enthusiast, healthy lifestyle proponents, construction and repair, dating and other.

Electronic interrogation method was chosen based on the need to interrogate a large number of respondents. Electronic interrogation format speeds up data collection process, making it easier, faster and at lower investigation costs. Among other things, electronic interrogations have flexible content and design creation opportunities, for example, audio and video materials can be added to the questionnaire that in turn can attract extra attention of respondents and interest to participate. During analysis, electronic interrogation results are easier to be organized, structured and

analyzed. This view has been supported by Berger (2011), Miller and Brewer (2003). To ensure accurate and detailed results, the authors analyzed the data, collected by means of interrogation, analytically by using SPSS. A total of 1320 respondents participated in the interrogation on buyers' behavior in sales promotion during sales promotion activities, including 1199 females and 121 male aged 18–77 years (all of them buyers of foodstuff in Latvian retail networks). In order to achieve the objective and to prove or refute the suggested hypotheses the authors interrogated the target audience, which differed by age, income level, marital status, interests, lifestyle and personal characteristics. The distribution of respondents by age groups is shown in Table 1.

According to the results of Table 1, the largest group of interrogated respondents is aged from 26 to 35 years old—32.26%, the second largest group is from 36 to 45 years old—21.82%, the third group—the youngest respondents aged 18–25 years old, or 20%. The average age of the respondents amounted to 37 years old.

This is a characteristic Latvian consumers' purchasing power age with a stable and sustainable consumer behavior in the process of purchase decision-making. Table 2 reflects the level of respondents' income level. According to the data of Table 2, the largest group of respondents by personal income is from 200.01 to 400.00 euros per month, the second largest group is from 600.01 to 800 euros per

Table 1 Distribution of respondents by age groups

Age group (years old)	Number of respondents	Percentage of respondents
18–25	264	20
26–35	426	32.26
36–45	288	21.82
46–55	224	16.96
56–65	96	7.27
66 and up	22	1.69
Total	1320	100

Source: Developed by the authors

Table 2 Distribution of respondents by income level (after tax, per month)

Income level (EUR)	Number of respondents	Percentage of respondents
Less than 200.00	153	11.6
200.01–400.00	327	24.68
400.01–600.00	270	0.5
600.01–800.00	237	18
800.01–1000.00	155	11.7
1000.01–1500.00	101	7.7
1500.01–2000.00	37	2.8
More than 2000.00	40	3
Total	1320	100

Source: Developed by the authors

Table 3 Distribution of respondents by marital status

Marital status	Number of respondents	Percentage of respondents
Living single	195	14.8
Living with parents	127	9.6
Living in civil marriage, no children	288	21.8
Living in civil marriage with a child/children	318	24.1
Married, no children	87	6.6
Married with a child/children	303	23
Living single with a child/children	2	0.2
Total	1320	100

Source: Developed by the authors

month. Overall, the respondents have an average income level that exceeds the state minimum salary in Latvia. Respondents' income may indicate the possibility to choose foodstuff and at the time of purchase not to rely on economic factors only, but to evaluate sales promotion activities from various aspects. Table 3 shows the data on respondents' marital status.

According to the data of Table 3, the majority of respondents live with their civil partner with or without children; 23% of respondents are married and live with a child or children. Respondents' age and lifecycle stage show specific values and attitude, based on rational and well-considered purchase decision-making behavior.

4 Findings of Empirical Research of Consumers' Behavior in Foodstuff Purchasing Before Purchase on Purchase Stage

In order to investigate consumer's behavior before the purchase of foodstuff, the respondents were asked to assess their demand for foodstuff groups by 5-point scale (0-never buy, 1-very seldom, 5-very often). According to the data of Table 4, the most demanded and purchased foodstuff groups are dairy products, meat and meat product production, processing and canning products and fruit and vegetable processing and canning products. Less purchased foodstuff groups are grains, confectionery and bakery products. The lowest demand is for fish, crustaceans and shell-fish processing and canning products, as well as for vegetable and animal oils and fats. On the one hand, the most demanded and purchased foodstuff rating shows the change of respondents' consumption habits, based on the increase of demand for healthier products. On the other hand, the needs may change and therefore trading companies, together with the manufacturers, need to carry out researches in this field (followed by offering new products, brands and communications).

Table 4 Respondents' most demanded foodstuff groups

Range	Foodstuff groups
1	Dairy products (average score—4.3 of 5)
2	Meat and meat product production, processing and canning products (4.2)
3	Fruit and vegetable processing and canning products (4.1)
4	Grain milling products, starch and starch processing products (3.9)
5	Confectionery and bakery products (3.5)
6	Fish, crustaceans and shell-fish processing and canning products (3.2)
7	Vegetable and animal oils and fats (2.9)
8	Other foodstuff (2.2)

Source: Developed by the authors

Table 5 Foodstuff purchase influencing factors

Range	Influencing factors
1	Product quality (average score—8.9 of 10)
2	Product price (8.6)
3	Discounts and other promotion activities (8.3)
4	Product ecology (7.8)
5	Brand recognition (6.7)
6	Country of origin of the product (5.3)
7	Emotions (4.9)

Source: Developed by the authors

Answering to the question on foodstuff purchase influencing factors, the respondents considered product quality, price factor, as well as sales promotion and product ecology to be the crucial factors. The respondents were offered to evaluate all factors by 10-point scale (0-the factor does not have influence at all; 10-crucial factor). Brand and the country of origin are less decisive factors when purchasing foodstuff. There is a small difference between product quality and price as product selection criteria. Thus, consumers pay attention to the ratio "price-quality". Investigating correlation between general foodstuff purchase influencing factors, it has been revealed that there is a certain difference between the choice of males and females. For example, males pay less attention to the product price and sales promotion activities offered. More attention is paid to the quality of the product, its brand and the country of origin (Table 5).

In order to investigate the consumers' behavior in product purchase decision-making process, the following questions were asked: How many times a week do you purchase foodstuff? Do you make a product list of products before buying? Do you make the purchase decision individually or after another person's consent? What is the approximate portion of spontaneous purchases in possible purchase volume? The authors conclude that the respondents make foodstuff purchases, based on a variety of habits, preceding the purchase decision-making: 12.4% (164) of respondents make up a complete product list before purchasing, but 48.5% (640) of

respondents make a shopping list, noting only the major necessary products. Amongst the respondents, there are 39.1% that do not make a shopping list, that shows that in foodstuff purchasing process the respondents select, compare, evaluate and take the decision to purchase the product directly in the outlet.

Prior to foodstuff purchase, the majority of respondents (47.9%) make decision on final product selection, listening to the recommendations of their relatives while 10.4% of respondents pay attention to the recommendations of friends and acquaintances, 6% listen to the doctor's recommendations and 6.6% listen to food experts' recommendations. A relatively large number of respondents—29.1%—make foodstuff purchase decisions individually. These results show that word-of-mouth communication has a great role in purchase decision-making process.

Regarding the purchased foodstuff, 5.2% of the interrogated respondents buy only the items that were planned, but 94.8% of respondents make unexpected (spontaneous) purchases during foodstuff purchasing. 37% of them make spontaneous purchases, the portion of which in total volume of purchases accounts for 10–30%. 28.2% of the respondents make up to 10% of spontaneous purchases while for 16.5% of respondents, spontaneous foodstuff purchases can reach up to 50% of the total purchase volume. 3.5% of interrogated respondents have noted that nearly always foodstuff purchases occur spontaneously. This means that placement of goods in the outlet, customer service and internal communication in the store play an important role in foodstuff purchasing process. In the authors' opinion, integrated marketing communications and especially content marketing in internet are of great importance.

Analyzing the buyers' behavior at the purchase stage, the authors have calculated the correlation between making a list prior to purchase by the respondents and the quantity of spontaneously purchased foodstuff (Table 6).

According to the data of Table 6, the correlation coefficient is statistically significant with a probability greater than 0.99 or significance level less than 0.01. This means that there is a statistically significant correlation between the foodstuff list, made by the respondents, and the quantity of spontaneously purchased foodstuff. If the respondents make up a complete or incomplete product list prior to

Table 6 Correlation between making a foodstuff list and the quantity of spontaneous purchases

		Do you usually make a list before foodstuff purchase?	Please assess the approximate portion of spontaneous purchases in total purchase volume
Do you usually make a list before foodstuff purchase?	Pearson correlation	1	0.276
	Sig. (2-tailed)		0
	N	1320	1320
Please assess the approximate portion of spontaneous purchases in total purchase volume	Pearson correlation	0.276	1
	Sig. (2-tailed)	0	
	N	1320	1320

Source: Developed by the authors

purchase, they make a less quantity of spontaneous purchases during purchasing process.

There is also a tight correlation between the respondents' foodstuff purchase frequency and its impact on spontaneous, unplanned purchases (Table 7).

According to the data of the Table 7, the correlation coefficient is statistically significant with a probability greater than 0.99 or significance level less than of 0.01. This means that the more frequently the respondents purchase foodstuff, the more often they make spontaneous and unplanned purchases.

The quantity of spontaneous purchases made by respondent is also affected by age and income level. In Table 8 one can see the correlation between respondent's age and the quantity of spontaneous purchases that create a close relationship between these indicators: the older the respondent is, the less spontaneous purchases he or she makes. This can be explained both with the respondent's financial situation and the personal characteristics and lifecycle stage.

The quantity of spontaneous and unplanned purchases also depends on respondent's personal income level.

According to the data of the Table 9, the correlation coefficient is statistically significant with a probability greater than 0.95 or significance level less than of 0.05.

Table 7 Correlation between foodstuff purchase frequency and the quantity of spontaneous purchases

		Purchase frequency	Assess the average portion of spontaneously purchased foodstuff in your purchases
Purchase frequency	Pearson correlation	1	0.276
	Sig. (2-tailed)		0
	N	1320	1320
Assess the average portion of spontaneously purchased foodstuff in your purchases	Pearson correlation	0.276	1
	Sig. (2-tailed)	0	
	N	1320	1320

Source: Developed by the authors

Table 8 Correlation between respondent's age and the quantity of spontaneous purchases

		Respondent's age	Assess the average portion of spontaneously purchased foodstuff in your purchases
Respondent's age	Pearson correlation	1	−0.116
	Sig. (2-tailed)		0
	N	1320	1320
Assess the average portion of spontaneously purchased foodstuff in your purchases	Pearson correlation	−0.116	1
	Sig. (2-tailed)	0	
	N	1320	1320

Source: Developed by the authors

Table 9 Correlation between respondent's income level and the quantity of spontaneous purchases

		Please specify your monthly income, -euros (after tax)	Assess the average portion of spontaneously purchased foodstuff in your purchases
Please specify your monthly income, euros (after tax)	Pearson correlation	1	0.066
	Sig. (2-tailed)		0.016
	N	1320	1320
Assess the average portion of spontaneously purchased foodstuff in your purchases	Pearson correlation	0.066	1
	Sig. (2-tailed)	0.016	
	N	1320	1320

The higher the respondent's income is, the bigger is the quantity of spontaneous purchases he makes.

As the result of the research it can be concluded that one hypothesis (H1) have been partly approved, as not only meat, but also dairy products have been marked as the most demanded foodstuff groups, but amongst purchase selection criteria product quality and price where the dominating ones. Two hypotheses (H2 and H3) have been approved entirely. The results of the research are significant and can be applied in practice, in marketing planning, by coordinating manufacturers, traders and other market actors and attracting consumers within *Relationship Marketing* communications.

5 Conclusions

Food manufacturers and traders should use *Relationship Marketing* concept, which provides a focus on consumer needs based on market segmentation, target market identification and interaction with the consumer. Within *Relationship Marketing* concept the companies should pay attention to researches on the most demanded foodstuff categories and satisfaction of consumers' needs by involving them in cooperation with the company. Within *Relationship Marketing* concept the companies should pay attention to researches on foodstuff selection criteria and to take them into account when planning marketing activities.

Foodstuff consumers' behavior in the market (including the pre-purchase and the purchase stage) is mainly determined by the following factors: demographics (gender, age); social (marital status); economic (income). In foodstuff outlets consumers' purchase volume, purchase frequency and proportions between planned and unplanned purchases should be analyzed and taken into account in marketing activities. There is a statistically significant correlation between demographic, social and economic factors of consumer's behavior in the market and purchase decision-making in the outlets.

Market segmentation and target market definition is not an end in itself, but rather the basis for marketing activity within *Relationship Marketing* concept in the field of product development and sales, pricing, customer service and communication. Involving consumers in this activity is mandatory. Improving market segmentation, the companies can plan a gradual transition from basic consumer relation level to the higher level.

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