

# CREATION OF RESPONSIBLE BEHAVIOR AND IMPACT ON SUSTAINABLE CUSTOMER BUYING BEHAVIOR IN RETAIL SECTOR

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Context of sustainable consumption is based on conscious and rational behaving consumer. The retail industry, from suburban big-box stores to boutique shops, is among the most public of industries. Retailers employ millions and directly enable most consumer purchases. As such, they are in a unique position to advance sustainability by educating consumers and offering products with recycled content, durability, and ethical supply chains. In this article, we write about what leading retailers are doing or not doing to advance principals of sustainability in the products or services they sell, and how the consumers sustainably thing. The article is a part of Scientifics project VEGA 1/0874/14: Use of neuromarketing in visual merchandising of food industry. The main aim of our article is through the selected statistics methods, to analyse an impact of sustainability on consumer decision and the processes in doing a good business in final visual merchandising. Through Apriori and association rules methods, we modelled a prototype of sustainable consumer on the basis of our questionnaire research, done in 2013 year and we mention a consumer behavior to food waste.

Keywords: sustainable consumption, responsible consumption, retail merchandising, apriori, association rules, food waste

## Introduction

Sustainability is a combination of two other concepts. One is eco-efficiency, a term of linking financial and environmental performance to create more value with less adverse impact. The other term is corporate social responsibility, which is defined as the business commitment to contribute to sustainable economic development, working with employees, their families, the local community, and society at large to improve their quality of life (Blackburn, 2007; Horská and Nagyová, 2013).

The concept of sustainable marketing is based on the following steps: analysis of socio-environmental problems, the analysis of customer behaviour, the values and objectives, as well as sustainable marketing strategy for sustainable development of the marketing mix and marketing sustainable transformation. The concept of sustainable marketing involves this trio; the ecological, environmental and green marketing (Paluchová and Benda Prokeinová, 2013; Gálová 2013). Sustainable marketing can be thought as trying to explicitly acknowledge the conflict between short term and long term gains for both; the organization and the consumer. Marketing also has a role in this transition through shaping consumer demand towards more sustainable consumption's options and away from socially and environmentally detrimental ones (Wells, 2013).

Responsible consumer is aware of the notes when purchasing goods or service information on the conditions and consequences of production to developing countries and also it prefers products and companies with better social and environmental performance; i.e. products whose production or consumption has any negative impact on people and the environment in developing countries. There're some facts of responsible and sustainable consumer's thinking:

- contemplated when buying;
- interested in composition and production of the product;
- disseminate information on, can explain why buying organic products;
- it does not leave the affected advertising / buy only what he or she really needs;
- not looking only at the price of a product or service;
- prefers fairtrade, FSC, raw and organic products;

- to support and buy the local products;
- favors voluntary humility before consumerism and trends (Paluchová and Benda Prokeinová, 2013).

As (Padilla and Simó, 2009) wrote, responsible consumer is defined as a person who is informed and aware of their consumer habits. He knows and requires his consumer rights; choose products with the least impact on the environment, but the highest impact on society.

We see also sustainability in relation to business practices of retail companies that the same model of consumer behavior and ultimately affect them. However, if you buy more than it consumes, which is starting to be a trend every developed economy, not only in Europe but also in the world, this is a problem with global impact, not only on the economy but also the environment. The Retail Industry Leaders Association (RILA) has released its 2013 Retail Sustainability Report, which highlights progress towards the industry's evolving sustainability objectives and identifies a class of top-performing characteristics. In report uncovered six significant trends (Elks, 2013):

- sustainability teams are growing;
- most companies act on sustainability investments that expect a two- to three-year payback;
- breadth of sustainability activities is increasing;
- most retailers measure energy, fuel, material usage, and waste generation; more than 25 % more will begin to measure code of conduct compliance, water usage, renewable energy generation, chemicals of concern and more over the next two years;
- pressure for retail sustainability efforts is strongest from employees, competitors, and regulators;
- certain identifiable attributes contribute to the growth and success of a retail sustainability program.

## Material and methods

### The implementation phase of research and development of the questionnaire

As a method of research, we choose a questionnaire. The survey was conducted online via Google Documents or through social networks, email but also

at universities in printed version from February to May 2013. Overall, we received 318 completed questionnaires. Representativeness of the sample by sex, residence, age, social status, education and income group was verified using the Chi-Square Goodness of Fit Test. The test results confirmed the representativeness of the sample in terms of gender and residence, which is a prerequisite for the realization of further analyzes.

### Behavior patterns of customers using association rules and statistical methods

Association analysis is the process of discovering association rules, relationships and dependencies between attributes and their values. The analysis is performed on the incidence of these attributes and their values in the transactions. In the area of knowledge-based systems can be a recommendation using association rules and considered one of the possible methods of acquiring knowledge from a variety of data, or already known knowledge. To generate recommendations for the user may be using one of the at least three strategies. These vary in shape transactions, which are used for mining association rules, respectively, using different metrics in the final stages recommendations. To obtain rules from transaction data can be used Apriori algorithm.

#### a/ Association rules:

– the concept of association rules was introduced in the paper by Agrawala. From there the following definition (see Table 1 and Table 2 for using Association rules), where,  $L = I_1, I_2, I_m$  is a set of binary attributes called items. Than  $T$  is a database transaction. Each transaction is represented as a binary vector, where  $t[k] = 1$  if  $t$  buys item  $I_k$  and  $t[k] = 0$  other. May  $X$  is a set of specific items  $L$ . We call it, a transaction  $t$  corresponds  $X$  if it is for all items  $I_k \in X$ ,  $t[k] = 1$ . Under Association rules are represented in the form of implication  $X \Rightarrow I_j$ , where  $X$  is set of certain items in  $L$  and  $I_j$  is one item from  $L$ , which isn't real in  $X$ . The rule is satisfactory in the set of transactions  $T$  with factor of trust  $0 \leq c \leq 1$  if minimum  $c\%$  from transactions in  $T$ , that are significant to  $X$  and  $I_j$  too. Trust is usually referred to as  $c$ .

- Promotion rule is defined as the percentage of transactions in  $L$ , which contents  $X \cup I_j$ . It denotes as  $s$ . Support essentially represents the frequency of occurrence of a given set of items in the database.
- Trust (confidence) is the probability of the right hand side rule condition occurrence left side. It is therefore the percentage of rules whose left side is  $X$  and  $Y$  right of all whose left side is  $X$ .
- Lift (interest): This rate determines how many times more often  $X$  and  $Y$  occur together than would be if they were statistically independent. In contrast to expectations is dependent on rules of thumb. The formula for calculating metrics lift:

$$\text{lift}(X \rightarrow Y) = \text{lift}(Y \rightarrow X) = \frac{p(X \text{ and } Y)}{p(X)p(Y)} = \frac{\text{trust}(X \rightarrow Y)}{\text{support}(Y)} = \frac{\text{trust}(Y \rightarrow X)}{\text{support}(X)}$$

#### b/ Apriori:

– to find frequently occurring sets of items can be used Apriori algorithm, which is stated in the paper Agrawal. Apriori sequentially generates sets of frequent items, the proceeds from the smallest (with the fewest elements) to largest. As far as possible, from the frequent sets with  $n$  elements generating sets with  $n + 1$  element. Set of frequent sets having  $n$  elements is called  $L_n$ . The procedures recommendation using association rules from the said general scheme differs in that instead of Neighbourhood Formation is the algorithm used data mining association rules. Its outputs are the rules containing some items on the left and right sides. In the third phase

is recommended for all items that are listed in the consequences (on the right) obtained rules. Therefore it is possible to take a limited number of items ( $N$  best), or any that meet certain criteria, such as where a degree exceeds a defined threshold (Paluchová and Benda Prokeinová, 2013).

#### c/ The Kruskal-Wallis test

– is most commonly used when there is one nominal variable and one measurement variable, and the measurement variable does not meet the normality assumption of an anova. It is the non-parametric analogue of a one-way anova. A one-way anova may yield inaccurate estimates of the  $P$ -value when the data are very far from normally distributed. The Kruskal-Wallis test does not make assumptions about normality (Handbook of Biological Statistics, 2009). We use this test for question about the improving of life style of our respondents (see Table 3). In this case, the value chi-square probability distribution on the basis of a comparison of  $p$ -value of 0.05. Kruskal-Wallis test says that there is a significant difference between mean values of the sample (all possible answers).

#### The research object

In our survey has a majority of the female part of the population 68.55%. Interviewed men were 31.45%. In terms of verification of the representativeness of the sample we found that Chi-Square Goodness of Fit Test based on the value  $Pr \geq 0.05$  ChiSq assumption about the representativeness of the sample. In our survey is evenly mixed city (57.1%) and the rural (42.9 %). In terms of verification of the representativeness of the sample we found that chi-square test confirmed the goodness of fit based on the value  $Pr > ChiSq = 0.099$  presumption of representativeness of the sample. The age ranges were generated by age of the population of Slovakia located on the statistics office (under the current 2013). The largest age group is 18–24 years (63.72 %), followed by the age group 25–34 years (21.45 %). At least numerous age groups represent the interval from 55 to 64 years (2.84 %). The resulting age structure is not relevant in terms of representativeness. The result of Chi-Square Goodness of Fit Test, we rejected the argument on the representativeness of the sample. The structure of socio-economic status was again transposed from the statistical office of the Slovak Republic. We can state that it is unrepresentative sample of the population, as the largest group again are students (64.98 %). Followed by relatively large groups like: employed in the private sector (15.14 %) and employed in the public sector (13.88 %). Positive survey is the fact that we have obtained the views of groups: senior (0.95 %), unemployed (2.21 %) and women on maternity leave (2.84 %).

## Results and discussion

The effort of our research about sustainability consumption and marketing was to see to identify patterns of consumer behavior who are interviewed. Under association rules, we attempted to create a so-called "Consumer model". We modelled two large groups of respondents, in the conditions of their purchasing decisions:

- Consumers – non students in terms of sustainable consumption (see Table 1).
- Consumers – students in terms of sustainable consumption (see Table 2).

Most of the questionnaire was dealing with sustainable consumption and basic environmental sustainability attributes. We have tried to identify certain patterns of behavior in terms of sustainability. From Table 1, we can say the following; the highest rate interstate shows the status-employed in the public sector, and i.e. 35.714 % of respondents and 90.09 % of respondents have a college education. For more detailed identification of this group come

**Table 1** Consumers – non students in terms of sustainable consumption

N	Antecedent	Consequent	Lift	Support in %	Confidence in %
1	"status = public sector employee"	"education = master degree"	1.24169	35.714	90.909
2	"Q10 = yes, I consume" – "age = "25–34""	"Q4 = has a garden"	<b>1.19583</b>	<b>36.607</b>	<b>85.417</b>
3	"Q10 = yes, I consume" – "age = "25–34""	"education = master degree"	1.16667	36.607	85.417
4	"education = master degree" – "Q14 = I try to separate"	"Q10 = yes, I consume"	1.16148	37.500	93.333
5	"Q14 = I try to separate"	"Q10 = yes, I consume"	1.15556	46.429	92.857
6	"Q4 = has a garden" – "Q14 = I try to separate"	"Q10 = yes, I consume"	1.15556	34.821	92.857
7	"education = master degree" – "Q4 = has a garden"	"Q10 = yes, I consume"	1.10394	49.107	88.710
8	"Q4 = has a garden" – "Q12 = yes"	"Q10 = yes, I consume"	1.10303	34.821	88.636

Source: own research, own elaboration, 2013

**Table 2** Consumers – students in terms of sustainable consumption

N	Antecedent	Consequent	Lift	Support in %	Confidence in %
1	"age = "18–24"" – "Q10 = yes, I consume" – "Q13 = I feed the farm animals"	"Q4 = has a garden"	1.24743	34.951	87.805
2	"age = "18–24"" – "address = village"	"status = student" – "Q4 = has a garden"	1.24106	36.893	87.356
3	"age = "18–24"" – "gender = man"	"education = secondary school with graduation"	1.12815	58.252	90.909
4	"status = student" – "age = "18–24"" – "gender = man"	"education = village"	1.12815	58.252	90.909

Source: own research, own elaboration, 2013

to further information. 36.60 % of respondents said that consume the goods they buy and are in 25–34 years, 85.41 % have a garden and higher education and try to separate a waste. We continued deeper analysis of the behavior among students. It's specific group not only in terms of food consumption, but also environmental behaviour.

As indicated in Table 2 further illustrated, to 34.951 % of respondents in age 18–24 bought food actually consumed and where unused food residues move farm animals. Confidence 87.805 % indicates that 85.75 % of those respondents who fulfill the foregoing conditions have a garden. For more detailed identification of this group, we come to the next information. 58.252 % of the respondents are men in age 18–24, while 90.90 % have secondary education and come from the countryside.

Environmental consumer behavior can be summarized as:

- conserve energy when switched off lights;
- switch off an electronics, do not work with it;
- preservation and maintenance of water consumption;
- recycling everything but mostly plastic cups and things paper;
- go to purchase with their own best fabric bag;
- boycott brands or products that do not make environmental policy and marketing;
- try to walk on foot or by bicycle as often as possible, or travel as a passenger in the vehicle, use public transport;

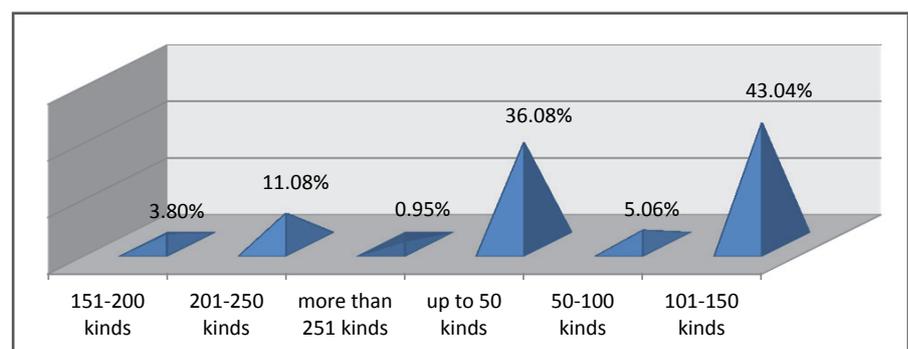
- composted kitchen cooking residues and garden waste.

In the following question (see Figure 1), we wanted to know, how many kinds of food, do the consumer have at home. The aim of the questions was the fact that the respondent hasn't run into food boxes and fridge and counted the food to be at home. The idea was to compel the respondent to think and reflect upon the content of their food cabinets. More educated respondents have completed the survey we were going to go through the food in your home and see what they all have in addition.

In the comparison with other countries, there are many marketing campaigns, which educate the consumers to sustainability consumption. Waste&Resources Action Programme (WRAP) informs, the people in United Kingdom, to love food and hate waste, it's called "Love Food,

Hate Waste"; in the year 2006–2010, it became 13 % waste decreasing (WRAP reports significant progress on waste reduction, 2011). The people, who plan their purchasing, use product list, and check the products in their home, produce less waste than the "spontaneous shoppers" (WRAP Consumer insight: date labels and storage guidance, 2011). In Belgium, European parliament support a proposal, to add into books at primary school a topic, called BruxellesEnvironnement, there was in 2009. Significant educational opportunities exist in hotel industry also. Hotels can contribute to waste minimalization, f.e. the offer to take an uneaten food home (for pets or for guests as well). This practice of restaurant or hotel management is in USA common phenomenon.

For the most essential factor in improving your lifestyle, more respondents considered active or sports, a limitation / exclusion of smoking and

**Figure 1** How many kinds of food do you have right now in your home?

Source: own research, own elaboration, 2013

**Table 3** How do you image of improving your healthy lifestyle? For each factor, always select only one number, where 1 – disagree, 2 – then I agree, 3 – I do not care, 4 – agree, 5 – agree

Analysis Variable: points		
Questions	Mean	Mode
Eating higher quality food products	4.18	5.00
More more exercise and sports	4.35	5.00
Restrict / eliminate cigarette smoking and alcohol use	4.16	5.00
Follow healthy food market trends	3.33	3.00
Eating in vegetarian and vegan restaurants	2.16	1.00
Eat smaller meals, more often times per day	3.96	5.00
Exclude the meat on its own a la carte	1.83	1.00
Conserving natural resources (purchase efficient light bulbs, appliances)	3.61	4.00
Preference food packaging from recycled materials	3.68	4.00
Search meditation / staging seminars / detoxification / massage	3.15	3.00
Exclusion / restriction of sweets	3.16	4.00

Source: own research, own elaboration, 2013

alcohol consumption and thirdly concludes wholesome food. Respondents identified the three most recurrent problems in society: alcohol and cigarettes, healthy exercise / sports, healthy eating and eating smaller portions more often throughout the day. About this fact (see Table 3) is also evidenced by a table showing the arithmetic mean and mode of the responses.

Kruskal-Wallis Test	
Chi-Square	1021.8194
DF	10
Pr > Chi-Square	<.0001

Consequently, we wonder if the views represented preferences, there are differences. The aim of the test is to identify the fact that there are two or more independent file medians same or different. The assay is used in cases where the variance files differ due to extreme values. The formulation of the null hypothesis consists of comparing the mean values of the sample are, we to assume that the mean values of analyzed files take similar values. In this case, the value chi-square probability distribution on the basis of a comparison of  $p$ -value of 0.05. Kruskal-Wallis test says that there is a significant difference between mean values of the sample (all possible answers).

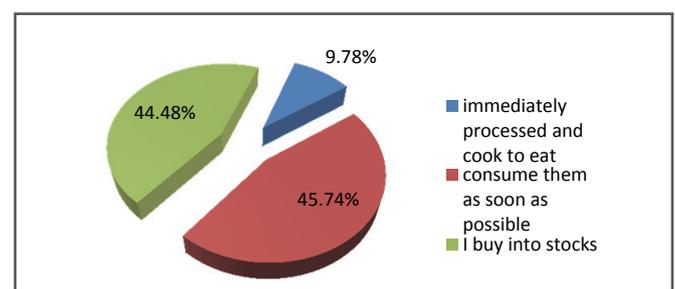
From the model of responsible consumer (Table 1, and 2), we see, that many consumer more often have a garden, depending on the crop. Many of them have only small garden at balcony, or in the front garden. In the villages, the consumers grow more kinds of fruits and vegetables. And because, the result of our questionnaire question shows, that 99.56 % of respondents have a small or big garden. This is caused by medial information, about the export increasing of these products to Slovakia. The food scandals keep at grown some season pieces of products, because the freshness, lower prices, higher content of vitamins and at home or in their garden, they have a control the level of chemical treatment using asw. There are many reasons, why the grown season's fruits and vegetables:

- crops are healthier;
- crops are tastier;
- to know, in their content are not so much chemie and pesticides;
- crops are higher quality;
- because, it's cheaper for me;

- it's only a hobby for me;
- because, more often negative media scandals about foreign import crops to Slovakia.

21.7 % of respondents in the course of the year to buy up the crop, but 78.3 % note that domestic production is sufficient for them all year. It can be said that the state can not, must resolve consumers themselves and hedge you. Of course, everyone does not have the opportunity to buy your own garden and not at all rule, each enjoy gardening and have time for it. Well this is one way of ensuring sustainable consumption under the rules of sustainability.

85.85 % of respondents said that consumes all bought food. If answered correctly according to their conscience, it would be in terms of sustainable consumption positive phenomenon. From the foregoing findings we therefore wonder how consume food. We have provided several classic ways custodial and food consumption. 45.74 % of respondents said they consumed foods as soon as possible (see Figure 2).

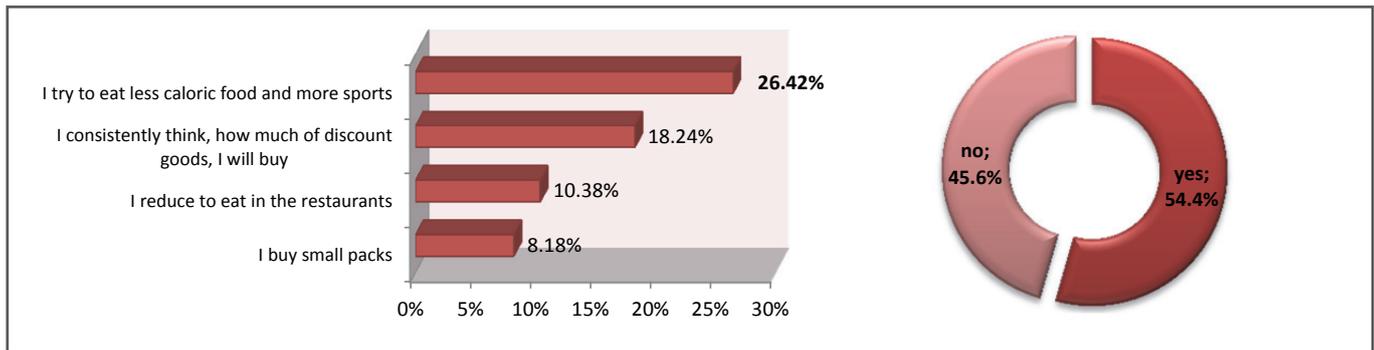


**Figure 2** How do you consume a food?

Source: own research, own elaboration, 2013

The second almost equally large group 44.48 % of respondents purchased food stocks. The buying behavior is influenced by many factors such as time demands at work, and food security for the family for a week. Only 9.78 % of respondents prefer fresh food and so soon after buying them and consumed.

Due to the fact that people buy in many cases buy into stocks, the situation arises that people eat more than they need, according to nutritional standards and dietary tables. We wanted to know whether the respondents



**Figure 3** Are you trying to reduce the consumption of food / per day?

Source: own research, own elaboration, 2013

in the case of increased consumption of trying to reduce the consumption of food per day.

Figure 3 illustrates that 54.4 % of respondents are aware that eat more food than it actually need. Subsequently, we asked these conscious consumers how to reduce consumption. Nearly 30 % of respondents try to eat less. Another group of respondents are aware that most stock purchased goods must be consumed as soon as possible and consequently to overeat. Opinions continue to limit the food in the restaurant and I buy a smaller package.

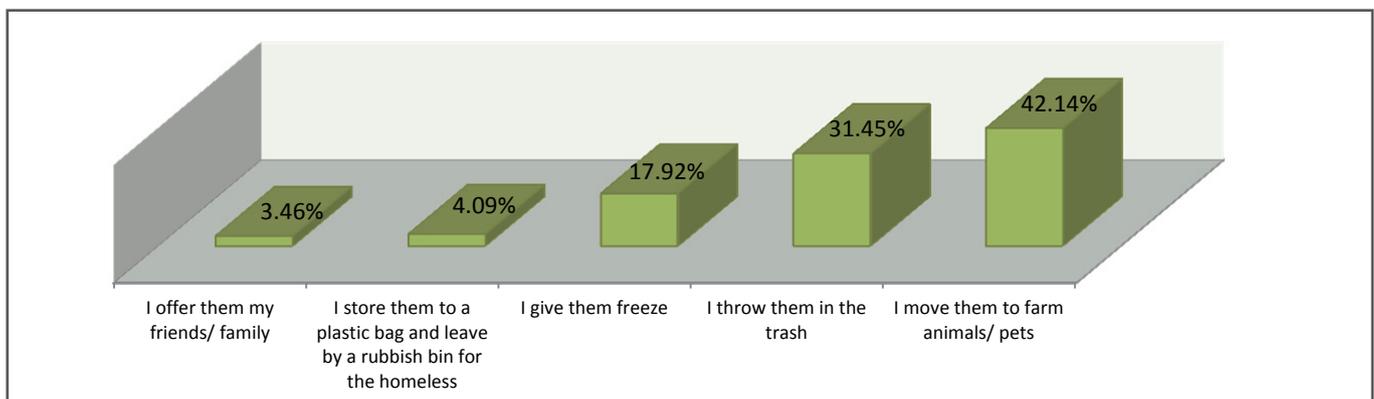
Sustainably and ecologically oriented consumer should take in the event of food waste on the following principles:

- planning, what I cook, and gradually learn how family consumes;
- noticing date on the package, and buy only as much as they know that I eat, respectively, I need today-tomorrow cooking;
- do not waste money because discarded foods are a waste of money;
- check the fridge that was well cooled and cleaned regularly, because it is clean, spontrebuje less electricity and food in it last longer shelf;
- food Storage, as they appear on the packaging;
- the principle of rotation, that is older bought foods we should keep an eye on a newly-bought can be stored in the back;
- eating smaller portions;
- should be able to use scrap or freeze foods;
- food can be used as compost for fertilizing and under.

In connection with the excessive consumption of food is closely related to the question concerning the disposal of surplus food. In terms of sustainability principles should be rational use of all resources and hence food production. Since the store is located bounty of food that the consumer has a chance to consume, tends to increase the amount of food waste.

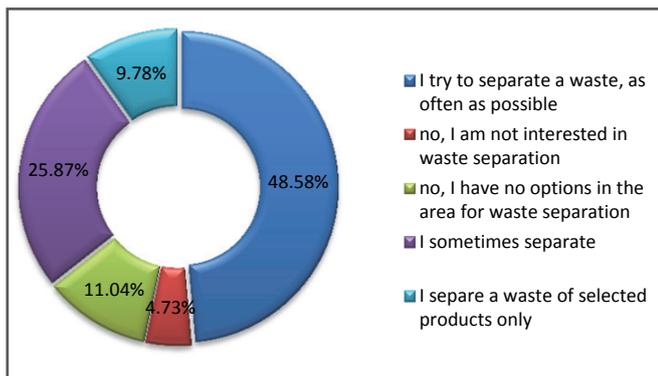
(Post bank, analytics, 2013) In Slovakia, on average, consume food and soft drinks is around 865.2 € / person. It goes much meat (209.2 € / person), followed by milk, cheese and eggs (144.6 € / person) and thirdly closes bread and cereals (156.6 € / person). The European Commission estimates that Union citizens yearly benefit nearly 89 million tons of food that do not consume. Per capita accounts for only about 179 kilograms of discarded food, two thirds of which are still edible. It is assumed that the current trend without taking appropriate measures would lead in 2020 to increase the ejection of food waste by 40 % to 126 million tons per year. To 79 million EU citizens do live below the poverty and 16 million are dependent on food aid charities. Therefore, we wanted to find out how to deal with respondent's surplus food in the home. Nearly 40 % of respondents moved surplus food to farm animals, a classic option – trash, 22 % of respondent's frozen foods and a few respondents said that food left out for the homeless or offers family.

According to our survey (see Figure 5), 48.58 % of respondents indicate that they are trying to separate waste, as often as possible. Only sometimes separate waste 25.87 %. Possibility to separate waste, which is not in the respondent's neighborhood, has been identified 11.04 % of respondents. There are also those who are separated only by selected waste products, it comes to 9.78 % of consumers. At least was ticked that are not interested in the separation of garbage. The fact remains that according to surveys; 70–80 % of the total amount of waste produced can be reused or recycled. As reported by the portal Waste, waste cake is formed to a greater extent biodegradable waste (45 %), and paper (25 %), glass (12 %), plastics (7 %) and other waste (Waster separation, 2013). Most waste produced by households in Slovakia, further industry, shops etc.



**Figure 4** The EC estimates that Union citizens yearly benefit nearly 89 mil. tonnes of food, do not consume. What do you do with the food, you don't eat?

Source: own research, own elaboration, 2013



**Figure 5** Do you separate a waste from the food, which did you consume?

Source: own research, own elaboration, 2013

Here are some tips on how should sustainable and environmentally minded consumers to minimize waste and prevent its occurrence:

- own "eco style": resistant advertising, fashion and consumerism, to reflect on whether they need to consume as much as is currently the case;
- thinking before buying, how much waste resulting from our purchase and whether we use it or be recycled, for example. Using a custom textile bags, pay phone (eliminating blocks and paper bills);
- only buy products that also need: that are durable and can be repaired or used otherwise (pot, freeze, give animals);
- attempt to avoid unnecessary disposable packaging and food packaging (reducing consumption of products in cans, in multilayered packaging and PET bottles);
- known rule – regional and local contrary preference for local products, food and more frequent purchases on the market at supermarkets - in short distance is not necessary to use a large amount of packaging;
- search unpacked distribution: (purchase detergents, cosmetics or syrups into their own brought in containers);
- buy products packaged in larger volume bottles: because they last longer;
- preference environmentally friendly cleaning products: (a familiar vinegar, bicarbonate of soda are friendlier to the environment);
- clipboard sign that says "Do not throw the ads" avoiding unnecessary waste of unnecessary leaflets;
- let you send invoices, receipts, reminders, etc. via E-mail;
- once the pens day-to-day use, you return to them.

In the last years, the retails much more influence the consumers with marketing campaigns, supporting sustainability. As we can see, there is done by ending of giving plastic bags by the cash desk, many new logos of sustainability, as fish or forests protection, and fair trade product as well. Sustainable approaches in retail sectors is a modern techniques of many stores that sell the products at Slovak market, we define some approaches of two selected retails (see Table 4).

## Conclusions

In the conclusion of our article, we can summarize:

- the highest rate interstate shows the respondents, who are in status-employed in the public sector, and i.e. 35.714 % of respondents and 90.09 % of respondents have a college education. 36.60 % of respondents said that consume the goods they buy and are in 25–34 years, 85.41 % have a garden and higher education and try to separate a waste;
- 34.951 % of respondents in age 18–24 bought food actually consumed and where unused food residues move farm animals. Confidence 87.805 % indicates that 85.75 % of those respondents who fulfill the foregoing conditions have a garden. 58.252 % of the respondents are men in age 18–24, while 90.90 % have secondary education and come from the countryside;
- 43.04 % respondents have in average around 101–150 kinds of food at home;
- more respondents considered under the term of lifestyle's improving as: active or sports, a limitation / exclusion of smoking and alcohol consumption and thirdly concludes wholesome food;
- respondents identified the three most recurrent problems in society: alcohol and cigarettes, healthy exercise / sports, healthy eating and eating smaller portions more often throughout the day;
- 21.7 % of respondents in the course of the year to buy up the crop, but 78.3 % note that domestic production is sufficient for them all year, than more than 85.85 % of respondents said that consumes all bought food, and 45.74 % of respondents said they consumed foods as soon as possible;
- 44.48 % of respondents purchased food stocks but only 9.78 % of respondents prefer fresh food and so soon after buying them and consumed;
- 54.4 % of respondents are aware that eat more food than it actually need, nearly 30 % of respondents try to eat less;

**Table 4** Selected sustainable approaches in retail marketing activities

Retail brand	Sustainable approaches in this time
Austrian retail brand, a member of German group	• to increase a share of regional and local products (more than 65 % share of Slovak products in the food segment in 2014 year)
	• personalize each store to the maximum possible extent to the needs of its customers
	• to spend considerable resources on upgrading and replacement of equipment types with ecological refrigerant, which for their operation need the equivalent of about 30 % less greenhouse gas emissions compared to standard cooling system
	• introduction of active thermal protection of the building envelope combined with the accumulation of waste heat
German retail brand	• exquisite chocolate products of brand K-Classic supports global UTZ Certified program, aimed at the sustainable cultivation of coffee, tea and cocoa
	• to gradually reduce the amount of palm oil and for some goods and have already replaced the same quality vegetable oils, such as sunflower kernels, because of world destroying a palm trees
	• to globally promote responsible and gentle harvesting of forest timber, to sell many products of own brand K-Classic (sanitary paper products), these shaped by FSC®
	• marketing campaign "Quality from our regions" to supporting a home products and producers
	• the solution to the global problem of overfishing is MSC logo, under it are sold some fish products in Kaufland

Source: own elaboration, 2014

- ❑ food, which isn't consumed by respondents: 42.14 % move the food to farm animals, than 31.45 % throw them in to the trash or 17.92 % freeze them;
- ❑ 48.58 % of respondents indicate that they are trying to separate waste, as often as possible, only sometimes separate waste 25.87 %;
- ❑ possibility to separate waste, which is not in the respondent's neighborhood, has been identified 11.04 % of respondents, there are also those who are separated only by selected waste products, it comes to 9.78 % of consumers.

In response to the extensive proliferation of approaches to the responsible procurement of product bought in retails from sustainable sources, is oriented into some aspects of environmental, legal and social parameters of modern society. Sustainability trends in European retail sector do the big environmental and social challenges of business time and retails are aiming to derive financial value from these activities:

#### Aspects:

- ❑ **Environmental aspects:** sustainability (responsible thinking), special buying places (self cash desk, eko-dizajn, natural materials), climate change (animal, water protection), environmental protection, recycled fiber and other.
- ❑ **Sourcing and legality aspects:** country/region of product origin, information accuracy (content, misleading news) and legality.
- ❑ **Social aspects:** local communities and production, social marketing activities or supporting of developing countries.

#### Role of:

- ❑ **government** and regulators: international agreements, national policies, regulations, monitoring or enforcement;
- ❑ **consumers:** purchasing decisions, lifestyle choices, political support, peer-to-peer influencing;
- ❑ **businesses:** economic development, legal compliance, ethical practices, eco-efficiency and waste reduction, recycling, innovation.

#### Responsible consumerism

Retailers are beginning to look to their supply chains to make environmental improvements, as whole product lifecycle considerations are generating more attention. They have the ability to reduce the environmental impacts of their packaging by evaluating the need for the package, using less material, designing a package so that a minimum amount of material fulfills the functional requirements offers cascading environmental benefits. By reducing the quantity of raw materials used in the packaging, you can minimize its environmental and economic footprint. The retail resources help you purchase more environmentally friendly products through selling or buying the green products. In final, there is a transporting of products, which are in present time more important in business strategies of retail stores.

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