Time factor as one of the aspect that influences shopping in the food stores

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Abstract
The consumer purchasing behavior is changing every year due to the development of information, communication technologies and due to the influence of micro-moments, i.e., the amount of time in selecting, decision and purchasing of products or services. The buying in the shop accelerated and some customers spend less time in the shop, because before buying in the store, some of them have done detailed research on the Internet. The process of buying decisions, and factors which affecting on consumer preferences, the purchase itself to shopping evaluation of the usefulness of a product or service are a part of theory, which is called “consumer behavior”. The decision about the purchase of goods depends on the number of various cases of individual factors, of consumer’s perception, environmental factors, the environment in which he lives, or on the people with them he meets. To the factors that have a dominant influence on the decision-making process and ultimately on the purchase of goods also belong the situational factors too, such as time spent for buying. Time is a factor that is important, as for the seller, as well as for the customer. The customer satisfaction plays an important role for the seller, which is a defined by living up to his needs and wishes and whose achievement is nowadays becoming more and more challenging. On the one side, he must constantly expand the product range and create conditions for cultural, experiential purchase, which is a form of relaxation and on the other side, he adjusts the location of daily consumption goods, so that their purchase has been possible to realize as soon as possible and also to operate the cash register systems in such a way, that the more hurried customers were discouraged from other purchases. The aim of this paper is through questionnaire survey and time experiments to evaluate the importance of time by selecting of food shops in chosen retail food stores. Based on the results, in conclusion of this paper we suggest the possible solutions that could contribute to greater customer satisfaction and customer loyalty to individual food stores depending on the form of purchase.

Key words: consumer decision, food store, shop layout, time factor

JEL classification: M31

1. Introduction

Consumer Behavior and Its Factors

Shiffman and Kanuk (2004) define the consumer behavior as the behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs. It focuses on how individual consumers and families or households make decisions to spend their available resources on consumption-related items. (Horská & Paluchová et.al., 2011) in our behavior it is included what, why, when, where and how often the items are purchased, how often they use them as their value after the purchase, and impact evaluation to the future purchases, and how to treat it. Chartrand (2005) presents, the fact that the needs and desires of consumers and their environment is constantly changing, and the fact that the same marketing strategies may not be successful in every season and in every market, underlines the necessity to deal with the examination of consumer behavior. Richterová (2007) presents, that the object of consumer behavior examination becomes an exploration of what consumers buy, why they buy, and how, when, where and how often they buy it. The most serious are two issues, namely how and why consumers make decisions about
buying products and services. (Hodkinson & Ford & Foxall, 2011) another reason for consumer behavior examining is to acquire the knowledge about how consumers behave after the purchase as a value in consumption. These findings provide marketers the information about consumer willingness to implement repeat purchase, or how often and why buy a variety of alternative products etc. (Steffens, 2002). Unless marketing workers want timely response to major trends, and yet achieve the best results, it must continue to examine the target consumer group, its behavior in the market, as well as changes in the factors affecting it (Benda Prokeinová & Paluchová, 2014). Consumer purchasing decisions are heavily influenced by cultural, social, personal and psychological factors, which in most cases, the marketers can’t form themselves, but it is necessary that they take into account (Kotler & Armstrong, 2004). Solomon (2011) define other dividing of factors that affect consumer behavior, there are these three impact categories: internal effects (perception, motivation, learning, attitudes, personality, age group, and lifestyle), social influences (culture, subculture, social class, group affiliation), and situational influences (physical environment, time).

**Time Factor in Consumer Behavior**

Some of the fundamental dimensions of consumer behavior may be summarized by the factor time. In a way, time and money are interchangeable since time may be converted into money by working, and household appliances and cars have often the function of saving time (Garretson & Mauser, 1963). Jacoby, Szybillo and Berning (1976) presents time is both and antecedent to and a consequence of purchase. Consumers not only spend time and money to acquire products and services but also often use time as a substitute for money and vice versa. Purchase of daily consumer goods average Slovak spends two to three hours per week, representing more than 100 hours a year. The customers spend per purchase in the store from 18.5 to 39.8 minutes, depending on the size of retail chain (Gfk Slovakia, 2012). Slovaks increasingly enjoy shopping. In average, they spend for food shopping almost three hours a week. Thus, per year they spent in the store for six days (Ipsos Agency, 2015). Therefore, time may be used as a common denominator in the economic behavior of households. A time-expenditure approach to consumer behavior means viewing consumer behavior as a household management area in which members of the household interact and allocate tasks to maximize satisfaction of the input of the scarce resource time (or its equivalent money). Such an approach deviates much from the dominant stimulus-response, effects-of-the-marketing-mix research tradition in consumer behavior in which the consumer is positioned as a passive target for marketers’ efforts (Okada & Hoch, 2004).

2. Data and Methods

Data and sources:
- **Primary:** the perception and importance of time factor which affects a consumer by retail choosing in Slovakia was measured through data collecting with using of questionnaire in November and December 2015. In these retail chains, we addressed the random customers.
- **Secondary:** citation from Scientists researchers, papers and books in the topic of consumer behavior, time factor and store layout.

Object of our research:
- The sample are 40 customers (see Table 1), but five questionnaires was selected because of their incorrect completion, so it’s mean that the sample is reduced in 35 respondents.
Table 1: Structure of Addressed Respondents

<table>
<thead>
<tr>
<th>Age/Gender</th>
<th>Man</th>
<th>Woman</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 - 24 years</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>25 - 49 years</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>50 - 64 years</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Together</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: own research

Place of research:
- The research was mostly realized in stores in Western regions of Slovakia and in the different store formats (small food store, supermarket, hypermarket and discount).
- Following in 43 stores of different formats (see Table 2) was always done the same purchase of five items (1 piece of milk, 1 bottle of white wine, 1 piece of bread, 2 pieces of chocolates, 5 pieces of apples). The goal is to measurement the time, which is needed for purchasing realization.

Table 2: The List of Stores ‘Samples, in which the Spending Time of Purchase Was Measured

<table>
<thead>
<tr>
<th>Sales format</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food store (small up to 400 m²)</td>
<td>8</td>
<td>19 %</td>
</tr>
<tr>
<td>Discount store</td>
<td>11</td>
<td>26 %</td>
</tr>
<tr>
<td>Supermarket</td>
<td>11</td>
<td>26 %</td>
</tr>
<tr>
<td>Hypermarket</td>
<td>13</td>
<td>30 %</td>
</tr>
<tr>
<td>Together</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own research

Methods:
- Questionnaire directly done in different retail chains. It contents five questions.
- Descriptive (frequencies, quantiles, averages), and inductive (Chi-quadrat test) statistics. Rimarcik (2007) define: these tests verify that the differences may be actual and expected frequencies only random (variables are independent) or are too large to be only random (no relationship between variables).

We’ve set two hypotheses, they are following:

First:
- H0: Quantities are independent. There is not a relationship between gender and spending time in the stores for daily shopping.
- H1: Quantities are independent. There is a relationship between gender and spending time in the stores for daily shopping.

Second:
- H0: Quantities are independent. There is not a relationship between gender and spending time in the stores for huge/thought-out shopping.
- H1: Quantities are independent. There is a relationship between gender and spending time in the stores for huge/thought-out shopping.

3. Results and Discussion

The survey Barometer Cetelem (2015) shows, time spent for purchases are growing thanks to the Internet. The time spent in the store has decreased for nearly 40 % of Europeans; the Internet
has increased for each type of consumer. Time to shop is reduced and new trend called “drive” is increasing (fast shopping, by car, under one roof and close home). These are the basic reasons why the time is pressing for customers when choosing a food store. On Figure 1, we see that more than 60% of respondents are influences by time in their purchase decision making.

**Figure 1: Does Time Factor Influence Your Shopping of Food?**

![Diagram showing the percentage of respondents influenced by time]

Source: own research

Based on the evaluation of the importance of various factors that influence the selection of shops it can be seen in Table 3, the most important factors deciding the selection of retail. The respondents consider the location and sales format. On the contrary, a conscious evaluation considered the least critical factors as sales staff, store atmosphere and new technologies (e.g. self-service cash registers, electronic tags, delivery home, QR codes, etc.).

**Table 3: Factors Ranking by Importance**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Sales format</th>
<th>Store size</th>
<th>Location</th>
<th>Store layout</th>
<th>Store atmosphere</th>
<th>New technologies</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Min</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>25% quantile</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>50% quantile</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>75% quantile</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Max</strong></td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

**Ranking**

Source: own research

The verification of established hypotheses showed that for the first hypothesis, we assumed that there is a relationship between gender and time spent in shops for daily purchases. The difference in time spent between men and women is shown graphically on Figure 2. It is perceived by most, that women usually spend longer time in shopping compared to men, who prefers to step into the shop, search for particular product they have in mind, purchase it as quick as possible (unmindful of slight variations that lead to bit expensive purchases), leave immediately. Women, on the other hand, searches patiently for the kind of products in all available brands, compare the designs, checking for any offers available (unmindful of the long time they indulge in selecting a product of their choice), bargaining and end up purchasing the product to their utmost satisfaction. In Figure 2, most men buying over 0 - 10 minutes, women buy 11 - 20 minutes. Men buy for their needs and women shop for their wants. This dependence
was verified by using the Chi-square test of independence at a significance level of 0.05, with the hypothesis about the dependence of those attributes was confirmed.

**Figure 2: Dependence between Gender and Spending Time with Daily Purchases**

<table>
<thead>
<tr>
<th></th>
<th>0 - 10 minutes</th>
<th>11 - 20 minutes</th>
<th>more than 21 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>man</strong></td>
<td>9</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td><strong>woman</strong></td>
<td>4</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: own research

Also, we wanted to verify that gender is linked with a huge/thought-out shopping (see Figure 3). Again, the hypothesis is tested according to the attributes of the significance level of 0.05 using Chi-square test was confirmed.

**Figure 3: Dependence between Gender and Time Spending with Huge/Thought-Out Purchases**

<table>
<thead>
<tr>
<th></th>
<th>0 - 20 minutes</th>
<th>21 - 40 minutes</th>
<th>more than 41 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>man</strong></td>
<td>7</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td><strong>woman</strong></td>
<td>4</td>
<td>9</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: own research

On the basis of average times and same purchases, it can be seen in Figure 4, the longest average purchase was realized in discounts. On the contrary, the shortest was in small food stores to 400 m².

The reason of shorter average time for shopping in the comparison between hypermarkets and supermarkets is a fact, that the most realized purchases were done without shopping trolley, which greatly shortened the measured times. Overall, when the value of time spent on buying, hypermarkets induce customers in the subconscious idea that there are goods look more and more purchases in that there is a great selection and huge shopping area. When a customer in the store can choose from lots of small baskets will automatically be shortened its purchase and whereas the consumer is unaware.
4. Conclusion

In 2015, a majority of Europeans wished to buy more than save. It shows a number of favorable factors. Real drop in oil prices lighted invoices households for energy to release the purchasing power and changes in inflation. Changes in consumer behavior in Europe occurred in two ways. In the field of quantity and in quality of distribution channels, or sense of priorities that consume before or after attributed. Slovaks buy more even if they often do not have enough time for shopping in a store or over the Internet. In our research we found out, that more than 60% of respondents are influences by time in their purchase decision making. Most men buying over 0 - 10 minutes, women buy 11 - 20 minutes. Both hypotheses were confirmed. The longest average purchase was realized in discounts. On the contrary, the shortest was in small food stores to 400 m². In discounts and supermarkets, the customers spend more than 7 minutes. Over 6 minutes, they usually purchase in small food store or in hypermarket. Except time factor, in new trends of consumer behavior there are many factors which influence our emotions and senses directly on shopping place, as lighting, aesthetics and sale techniques, staff, aroma, musical background or color. These trends could be measured by modern survey techniques used in neuroscience too.

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References


Viete, kolko času strávime ročne v obchodech? Budete prekvapení.


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