Present Retail Network of Bratislava and Some Tendencies in Consumers’ Purchasing Behaviour

Summary
The article deals with the present retail network of the capital city of Slovakia, Bratislava, the localisation of which influences purchasing, which is a part of everyday life of consumers. Getting and making the geographical data on the retail network on the basis of new information technologies in the sphere of cartography more precise is made possible by making use of geomarketing in the sphere of retail trade, which offers new opportunities in its research. The structure of the article includes the characteristics of retail network of Bratislava and its influence on behaviour of consumers, methodology and results of research organised on the territory of Bratislava. At the end, the importance of the carried out research results for praxis is given.

Key words: retailing, retail network of Bratislava, consumer behaviour.

JEL codes: M31, R12

Introduction
The development of retail network of the capital of Slovakia Bratislava, which is strongly influenced by the increase of demanding requirements of consumers, resulted in the process of dynamic growth of a number of stores, the localization of which is to great extent influenced by purchasing behaviour of consumers. The accessibility of retail units can be taken for a fundamental problem with a wide application use in the planned praxis. In the first part the article gives the characteristics of the present retail network in Bratislava and its influence on the consumer behaviour. With regard to the fact that the character of the data basis on localization of retail network permanently remains the main problem, the second part of the article gives the methodology and results of the field research on the space distribution of the retail units on the territory of Bratislava, the capital of the Slovak Republic made within the research project of the Ministry of Education VEGA No.1/0039/11, Geographical Information System as a Source of Strategic Innovation of an Enterprise from the Point of View of Strengthening its Competitiveness. To illustrate the accessibility of the retail network and consumers, the visualization of the space data, which illustrates the problem being processed in individual parts of the article on the basis of cartographical techniques of geomarketing is used. At the end the importance of the research results for decisionmaking of entrepreneurs and the local government on the development of the retail network of the capital is given.
Characteristics of the recent retail network in Bratislava and its influence on behaviour of consumers

In the last decades, from the point of view of quality and size, there have been many important changes in the retail network of the capital of Slovakia Bratislava, which rank it in the very centre of progressive trends of the world business. On one hand it makes the access of the final consumer to the goods possible, on the other hand it is an important dynamically developing sphere of economic activities and a potential source of revenues. At the same time it forms consumer preferences and changes the life style of consumers with the aim to stimulate new needs. The market economy gradually results in the fact that consumer is no more anonymous, i.e. consumer is increasingly known as for the scale of his/her motivation and the products are being more orientated at individual qualities of consumers which differentiate them into segments. Under these conditions the meaning of shopping, which has become a full value free time activity of the inhabitants of Bratislava, is changing. At present the consumer’s being dominant in relation to the seller which is reflected in the fact, that the customer decides himself what he wants to buy, how much he wants to buy and where he wants to buy it, is evident. In the case of Bratislava this tendency is strengthened by the geographical position of the capital of Slovakia, which is located in the vicinity of the boundaries and her retail network is influenced by the retail network of Hungary and Austria – the countries closely neighbouring with Bratislava.

Thus the space (Lloyd, Dicken 1972, p. 136-150) is becoming a permanent component of decisionmaking policies not only of entrepreneurs in the sphere of retail trade, but also consumers who within the European internal trade are given opportunities for transfer to do shopping out of the territory of the capital, in the neighbouring states. With regard to the specific geographical position of Bratislava, the market strategy of her retail units must taken into higher consideration which are the main factors of national and transnational differentiation with regard to close vicinity of the neighbouring countries, which are only several minutes’ drive from the centre of the town. Conforming the offer to the regional specifics of the capital increases the added value of the assortment of goods and services being introduced to the market. The variety of offer connected with differentiated strategies of distributors, seeking additional services and information, complementary products, brands, prestige, service culture, highly qualified shop assistants and the like initiates the transfer of customers as for their shopping also within individual localities of Bratislava and leads to forming complex distribution channels. With rising level of retail network the customer has more and more opportunities of selection between different alternatives of purchase even within the same lines of goods, and thus also the opportunity to prefer more the qualitative aspects of his/her decisionmaking (e.g. he/she expects a permanently increasing level of offer, when choosing an alternative product he /she prefers the price, he/she requires growth of consumer value, he/she increases the individualization of behaviour and the like) to quantitative ones. He has got used to get more substantial purchases once or twice a week, and he drives to do the shopping in a more distant largespace stores equipped with a parking place and offering a choice of modern and brand goods. At present there has been a permanent growth of share of great, mainly the multinational companies in a total retail turnover, which results in the decline
of revenues of sellers. Recently largespace shopping centres, with multicinemas inside, administration buildings and a extensive network of petrol pumps responding to the development of automobile transport and transfers of consumers to do shopping.

In the retail market in Bratislava the concentration tendencies are reflected mainly as fusions and mutual acquisitions among the greatest trading companies, which mostly run these two kinds of largespace formats – hypermarkets and supermarkets. Among them the hypermarkets belong to the strongest distribution channels in the foodstuffs as well as non-food assortment.

Functional accomplishment of the territory of Bratislava is strongly influenced by market demand and development of private sector. To make use of the territory it is necessary to take into account the characteristic specifics of individual urban units of the town area which is laid out into:

- the centre: being represented by the municipal part Staré Mesto;
- the inner town – being represented by the municipal parts of the town such as Ružinov, Nové Mesto, Karlová Ves a Petržalka;
- the outer town: being represented by the municipal parts of the town such as Podunajské Biskupice, Vrakuňa, Rača, Vajnory, Devín, Devínska Nová Ves, Dúbravka, Záhorská Bystrica, Lamač, Rusovce, Jarovce a Čuľovo.

When formulating the requirements of the intensity of use of the territory, the following characteristic specifics of individual urban units of the town territory are taken into consideration:

- for the centre: block construction with a high range of polyfunction, the retail network helps the attractiveness of the town centre as well as its historical core part and is its functional and appearance factor. It has higher demand for parking facilities at the shopping and administrative centres including the parts of technical and operational equipment of the ground and underground areas. Due to historical reasons in the centre of Bratislava there are only several small shopping streets which are at present enriched by the shopping centre Eurovea. In the year 2001 the shopping facilities of the Bratislava centre was represented by 1,068 stores, i.e. 26.12% out of a total number of retail units of the capital;
- for the inner town: a combination of block, solitary and highrise areas making an area of dynamic shopping centers. Recently a number of bigger and more attractive shopping centres has arisen.
- for the outer town: a wide application of the housing function with the possibilities of building low floor areas and low floor family houses (similar to the rural character of attached villages), the possibility of localization of suburban shopping centres with higher demands for the size of the area as well as the land-use options for the localization of production plants. In the year 2001 in the outer town there were 704 stores, i.e. 17.5% out of a total number of retail units.

In spite of the fact that at the beginning the retail network of Bratislava was lagging behind other European retail trade, at the end of the nintees the processes of concentration (organizational and space-operational) and internationalization replaced the period of atomized development of the retail network. Thus it is resulting not only in the commercialization of central municipal parts but also in increasing the density of trade infrastructure in the historically undersized living quarters.
We can state that in the retail network of the Slovak capital Bratislava the following development tendencies, which are typical for the retail trade of the Slovak Republic, can be seen: growth of revenues of retail chains, departure and stabilization of some retail chains, competition on the basis of support services, growth in number of virtual shops, preferring of largespace points of sale and discount stores by consumers, seeking shopping centres as a form of spending free time, lavishing the sources producing non-repairable goods and packaging, intruding in the privacy by means of creating the databases of customers.

**Methodology and results of research on accessibility of largespace food stores**

Dynamics of development of trade on the territory of Bratislava within the last two decades requires monitoring, the results of which serve as indicators of demands for development of the territory of the Bratislava municipal region. For this reason in the years 2011-2013 a research on the retail network in Bratislava was made, which made it possible to gain information about further possibilities of influencing trade network in the town by means of the only existing instrument, i.e. the Land Use Plan of the town Bratislava. The research was a unique one and is a contribution to a long-term monitoring of development of Bratislava retail trade. Specific data on the condition, number, size and deployment of stores were gained. Some outputs were supplemented by the research of consumer buying habits. The research was made in 17 town parts of the capital divided into 236 urban districts and 4,089 retail units were mapped. The sample of the addressed respondents in the respective research was represented by 11,389 customers shopping in the retail establishments located in individual town parts of Bratislava. The respondents had to meet the condition of having a permanent or temporary residence in Bratislava and being older than 18 years.

**Table 1**

**Number of stores by the districts of the town Bratislava**

<table>
<thead>
<tr>
<th>District</th>
<th>Name of the quarter</th>
<th>Total number of stores</th>
<th>Total number of foodstores</th>
<th>Number of specialized non-food stores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bratislava 1</td>
<td>Staré Mesto</td>
<td>1 068</td>
<td>175</td>
<td>813</td>
</tr>
<tr>
<td>Bratislava 2</td>
<td>Podunajské Biskupice, Ružinov, Vrakuňa</td>
<td>1 179</td>
<td>185</td>
<td>901</td>
</tr>
<tr>
<td>Bratislava 3</td>
<td>Nové Mesto, Rača, Vajnory</td>
<td>570</td>
<td>97</td>
<td>429</td>
</tr>
<tr>
<td>Bratislava 4</td>
<td>Devín, Devínska Nová Ves, Dúbravka, Karlova Ves, Lamač, Záhorská Bystrica</td>
<td>541</td>
<td>110</td>
<td>285</td>
</tr>
<tr>
<td>Bratislava 5</td>
<td>Čunovo, Jarovce, Petržalka, Rusovce</td>
<td>731</td>
<td>136</td>
<td>522</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4 089</td>
<td>703</td>
<td>2 950</td>
</tr>
</tbody>
</table>

Source: The results of research within the project VEGA No.1/0039/11, *Geographical Information System as a Source of Strategic Innovation of an Enterprise from the Point of View of Strengthening its Competitiveness.*
Map 1
Spread of the Bratislava stores

Legend
- Point of sale
- Inner town
- Boundaries of the town Bratislava
- Outer town
- Centre

Source: The results of research within the project VEGA No.1/0039/11, Geographical Information System as a Source of Strategic Innovation of an Enterprise from the Point of View of Strengthening its Competitiveness.
The principle of research was questioning the consumers in the retail unit researched about the purchases on the given assortment out of this unit. This principle of questioning makes it possible to measure the impact of the present set of offers and arrange the level of influence of individual forms of offers of retail units. The information gained became part of the databases of geographical data necessary for deeper analysis of the space aspect of consumer behaviour.

The procedure of research was the following:
- defining the type of the mapped retail units according to the classification of economic activities NACE SK. Determining the sample of respondents and number of interviewers;
- realization of the survey: notation of location of retail units on the map according to the character of retail unit as well as according to the size, sphere of activity and geographical area. Completing the survey;
- processing the survey and visualization of the space data on the basis of cartographical techniques of geomarketing.

Layout of the Bratislava stores on the basis of the realized research is shown in the map 1. The layout of the retail units shows their highest concentration in the historical core of the town and its close environment (Map 1). The smallest number of stores can be found in those town parts which have partly kept their rural character although in the latest years they have been exposed to the housing suburbanization (such as e.g. Rusovce, Jarovice) in the wider up-country of Bratislava. A specific life style of the suburban residents is connected with a specific consumer behaviour as well as the rise of shopping centres in the outskirts of Bratislava under the commercial suburbanization. Another reason of lower concentration of stores are the buying flows of residents towards the shopping centres.

Some results of research

According to the Statistical Office of the Slovak Republic the extent1 of the town Bratislava in the year 2010 was 367.7 km². The research results show (Map 2) that the residents of the District 4 migrate to other districts to do shopping in their favourite stores the most. Vice versa the residents of the District 5 travel to other district the least. This fact results from the differences between the structure of stores in these territorial districts, which is reflected in the offer of goods taking into consideration the way and events of everyday life of a consumer. (the place of work, the place of leisure and the like).

On the basis of migration of consumers to do shopping we can claim that their accessibility of retail units is a strategic element of their market position. Accessibility of retail units in foodstuffs, which are the basic structural element of assortment plays a specifically important role. It is created by part of daily purchases and therefore their layout in the town is of key role. The analysis of the research results shows, that new consumer models of consumer

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Map 2
The main purchasing gradient of customers among individual district of Bratislava

Legend

District

District 1
District 2
District 3
District 4
District 5

Source: The results of research within the project VEGA No.1/0039/11, Geographical Information System as a Source of Strategic Innovation of an Enterprise from the Point of View of Strengthening its Competitiveness.
buying behaviour are arising, where space has begun a key aspect which similarly to social and cultural aspects of shopping has gained a new dimension. This new dimension is connected with time and structural changes of foodstuff retail trade. These changes are reflected in replacing small family food stores by largespace supermarkets and hypermarkets. The aim of this research was to learn if a worse accessibility of largespace food stores for low income groups of inhabitants, who do not own a car, leads to purchases of foodstuffs in smaller local establishments which are often offering a smaller variety of foodstuffs at higher prices, which leads to creating space disparities and disruption of the concept of space justice and to worsening the quality of life. From this point of view we can take monitoring the relations between purchasing behaviour and space structure of retail environment for purposeful and inspiring. The key role is measuring the accessibility of stores on the basis of application of a measure based on the possibilities in the traffic network, which can be quantified by a number of retail points accessible within a defined distance from a given traffic intersection. We must say that the time accessibility is given not only by the distance itself but also by the way of covering the distance and the like. In general the Bratislava consumers (almost 41% of respondents) state that they prefer an automobile as a way of transport to the point of sale, 30% use traffic and 28% go to the shops on foot.

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The results of research (Križan 2013, p. 142-144) of accessibility of largespace stores (supermarkets and hypermarkets) by the application of the measure based on the opportunities in the traffic network prove that from 11 urban districts it is possible to reach only 10 stores which meet the criterion of supermarket or hypermarket within 30 minutes.
Table 2
The chosen indicators of accessibility of supermarkets and hypermarkets

<table>
<thead>
<tr>
<th>Number of largespace stores</th>
<th>Number of urban districts</th>
<th>Number of inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>absolute</td>
<td>relative*</td>
</tr>
<tr>
<td>do 10</td>
<td>11</td>
<td>8,4%</td>
</tr>
<tr>
<td>11 až 20</td>
<td>24</td>
<td>18,3%</td>
</tr>
<tr>
<td>21 až 30</td>
<td>17</td>
<td>13,0%</td>
</tr>
<tr>
<td>31 až 40</td>
<td>27</td>
<td>20,6%</td>
</tr>
<tr>
<td>nad 40</td>
<td>52</td>
<td>39,7%</td>
</tr>
</tbody>
</table>

Explanations: *a relative number of the researched urban districts (131), **a relative number of all residents of the town Bratislava (428 672).
Source: The results of research within the project VEGA No.1/0039/11, Geographical Information System as a Source of Strategic Innovation of an Enterprise from the Point of View of Strengthening its Competitiveness.

The given urban districts are located in the edge parts of the town while the least favourable accessibility of given stores was measured in the case of four urban districts, which proves undersizing of these urban parts by the stores of greater format.

The districts building in the category of 11 to 20 stores accessible within 30 minutes can be localized in two more significant regions. The first of them is a northwestern part of the town and the second one the eastern part of the town. Although several stores can be found in more urban districts of this group, the consumers have to travel to other urban parts to do shopping in larger formats. Besides the given districts also the stores located in the outskirts in the southern part of the town, belong to this category.

More favourable accessibility of supermarkets and hypermarkets (category 21 to 30 stores) is characteristic for 17 urban districts (13%) located closer to the town centre. These regional districts create some kind of enclosure, the perimeter of which is narrowing in the case of the category 31 to 40 stores. In these town areas there are concentrated more monitored stores or the accessibility to the centre to further establishments does not exceed the given limit of travelling time (30 minutes).

The most favourable accessibility of the analyzed stores is characteristic for the most numerous group of districts (39.7% of urban districts), in which at the same time the greatest number of the town inhabitants lives (39.4%). The greatest number of given stores (over 40 stores) is accessible from these urban districts. From the point of view of space it is a wider town centre and other town parts, in which the supermarkets and hypermarkets are laid out in the vicinity of important traffic communications. The map 1 illustrates the accessibility of largespace stores in the territory of the town Bratislava. In the survey the consumers (83.9% of the analyzed urban districts) expressed total satisfaction with the accessibility of supermarkets and hypermarkets. An average evaluation (very favourable accessibility) clearly prevailed.

In average, customers spend 109.17 minutes or 1.81 hour shopping. So customers are willing to spend a long time shopping which is caused mainly by the offer of largespace stores.
Map 3

Accessibility of supermarkets and hypermarkets in the territory of the town Bratislava

Source: The results of research within the project VEGA No.1/0039/11, Geographical Information System as a Source of Strategic Innovation of an Enterprise from the Point of View of Strengthening its Competitiveness.

Conclusions

The results of the realized research proved extensive knowledge about the retail network and can be a challenge for the land use plan of development of the town how to improve the conditions of life of the residents and thus navigate the economic prosperity towards the sustainable development in conformity with the strategy Europe 2020. In the case of Bratislava this issue is actual at the macroregional, regional and crossborder levels.
Bibliography


Obecna sieć detaliczna Bratyslawy i niektóre tendencje w zachowaniach nabywczych konsumentów

Streszczenie

Artykuł dotyczy obecnej sieci detalicznej miasta stołecznego Słowacji, Bratysławy, której lokalizacja wpływa na dokonywanie zakupów, stanowiących część codziennego życia konsumentów. To, że możliwe jest bardziej precyzyjne uzyskiwanie i tworzenie danych geograficznych na temat sieci handlu detalicznego na podstawie nowych technologii informacyjnych w sferze kartografii, uzyskuje się przez wykorzystanie geomarketingu w sferze handlu detalicznego, który oferuje nowe możliwości w jego badaniach. Struktura artykułu obejmuje charakterystykę sieci detalicznej Bratysławy i jej wpływu na zachowanie konsumentów, metodologię i wyniki badań przeprowadzonych na terenie Bratysławy. Pod koniec opracowania podano znaczenie wyników przeprowadzonych badań dla praktyki.

Słowa kluczowe: handel detaliczny, sieć detaliczna Bratysławy, zachowania konsumentów.

Kody JEL: M31, R12

Нынешняя розничная сеть Братиславы и некоторые тенденции в покупательском поведении потребителей

Резюме

Статья касается нынешней сети розничной торговли столицы Словакии, Братиславы, размещение которой влияет на покупки, представляющие собой часть повседневной жизни потребителей. То, что возможно более точное получение и формирование географических данных насчет розничной сети на
Основе новых информационных технологий в сфере картографии, достигается путем использования геомаркетинга в сфере розничной торговли, который предоставляет новые возможности в ее изучении. Структура статьи содержит характеристику розничной сети Братиславы и ее влияния на поведение потребителей, методологию и результаты исследования, организованного на территории Братиславы. В конце указывают значение результатов проведенного изучения для практики.

Ключевые слова: розничная торговля, розничная сеть Братиславы, поведение потребителей.

Коды JEL: M31, R12

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