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Communication Today, 2024, Vol. 15, No. 1

BEYOND DATA: STRATEGICALLY LEVERAGING CONSUMER METRICS AND MARKET SIGNALS OF BUSINESS PROSPERITY IN THE CONTEXT OF MARKETING COMMUNICATIONS

Tomáš FAŠIANG – Pavel GEŽÍK

ABSTRACT:

In the dynamic environment of global markets, understanding the complexity of the relationships between economic indicators and consumer behaviour, which can be deliberately influenced by targeted communication activities, is becoming a decisive competitive advantage in achieving economic prosperity for businesses. The aim of the study is, based on market data correlation, to explain and approach the interrelations of selected economic attributes and metrics of consumer behaviour. The inquiry is conducted in the scope of optimisation determination of the allocation of the purchase gradient of a business unit in the context of maximising the effect of communication and service activities oriented towards achieving economic prosperity of the business entity. The focus of the study reflects the application of the interconnectivity of market predisposition, characteristics of the target group and geographic servicing in the form of localisation of the business unit in the paradoxical situational model of Hotelling's Law. The result of the study confirms the leveraging effect of transactional increase and the rationale of localised communication effect for influencing consumers' purchase decision-making processes in the purchase pairing of a business unit.

KEYWORDS:
business, consumer behaviour, economic indicators, hotelling's law, marketing communication

https://doi.org/10.34135/communicationtoday.2024.Vol.15.No.1.7

1 Introduction

Consumer behaviour is currently the subject of several foreign and domestic authors, who conceive it generally as an interactive process of the ways and forms of shopping in broader and narrower concepts. The study of consumer behaviour helps the understanding of the needs of customers, mapping potential and trends, which evokes a quest for a better understanding of individual markets and the subsequent development of marketing strategies. This is a relatively complex process, due to the number of controllable factors and their propensity to interact and influence each other (Kusá & Hrabačková, 2012).

The evolution of consumer behaviour is constantly influenced by various global changes that are dynamic, also by new methods of qualitative and quantitative research, technological possibilities of interactive information search, the rise of digitalisation and artificial intelligence, and changing approaches in marketing communication, especially in the online space.

The expansion in digital technology is a major contributor to changes in marketing and marketing communications, bringing entirely new opportunities and ways of reaching consumers. Practically since its inception, marketing communication has been subject to continuous change, and its changes are so frequent that many companies hardly keep up with the current trends in this area of marketing (Vaštíková, 2014).

According to Tuten and Solomon (2014), marketing communication is evolving and has so far gone through three stages – traditional, tradigital and is currently going through a social-media stage. These stages are based on the overall nature of marketing in each period.

In the consumer's position, the consumer's behaviour comes to the fore, not only in relation to the actual purchase process, but also in relation to pre-purchase and post-purchase behaviour. Each behaviour takes place at a different stage – whether before, during or after the purchase – and has certain characteristic processes that the consumer goes through. In the pre-purchase phase, the consumer is still in the process of becoming aware of the need, searching for information, and selecting from the available alternatives. In the purchase phase, the consumer displays actual purchasing behaviour related to a specific purchase decision and after the purchase the consumer goes through an evaluation process.

During these partial processes, the consumer is constantly accompanied by various facts and influences that shape their purchasing behaviour. Based on these facts, influences, and manifestations of the consumer, it is possible to identify the consumer and thus tailor the marketing activities of the business entity directly to them. Therefore, the location of business units must match the needs and concentration of customer requirements to ensure availability and the necessary capacity according to the size, structure, shopping habits of the population of the area of interest (Hes et. al., 2010).

The determination of the shopping gradient represents a basic starting point for quantifying the potential sales volume and a means for rationalising the marketing communication of the retail unit in the context of customer perception of value. The shopping catchment represents the active sales radius of a retail outlet within which, through an appropriate communication strategy, its performance can be maximised.

2 Methodological Overview

The methodological basis of the scientific study is the explanation of selected relationships that have an impact on the economic prosperity of a business entity and form three levels – views of the study, which can be interpreted by the following figure.

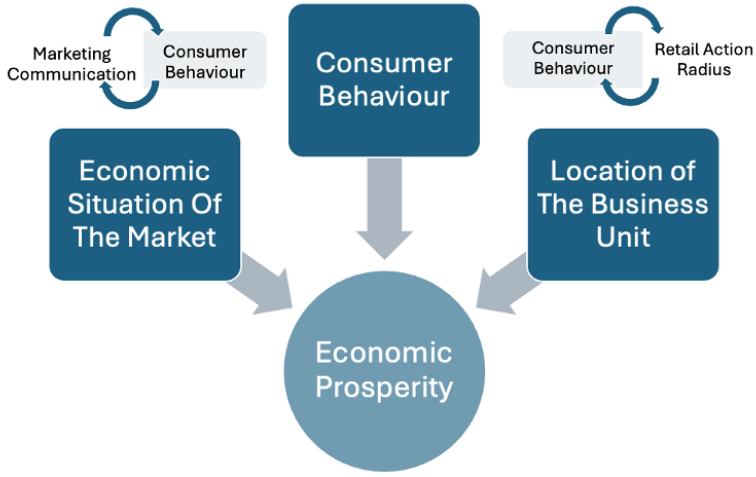


Figure 1. Linkages of selected market attributes
Source: own processing, 2024

The level of the economic situation in the market describes the links interpreting market signals to understand the impact of economic indicators on the turnover of the business entity. Which allows the prediction of market opportunities for the entity or expectations of maximising its activities in the context of profit achievement.

The level of consumer behaviour presents selected consumer characteristics through which the content focus of marketing communications and the metrics needed to determine the market potential and action radius of the business unit can be determined.

The business unit location level describes the importance of the location of the business unit in terms of service activities. The starting point is to optimise the location to attract as many customers as possible, thereby ensuring increasing sales. The location in question also represents the spatial definition for the application of communication activities.

The present scheme presents a model view of the structure of the study and its principal components, which will be analysed in a real market environment. The understanding consists in a simplified interpretation of the view of the interconnection of the attributes of the market economic situation, consumer behaviour and the location of the business unit with impact on the economic prosperity of the business entity. At the same time, it describes the indicated potential of the effect of marketing communication and the action radius of the business entity on the consumer's decision-making processes with an impact on the financial performance of the business entity.

To be able to apply the above levels of the scientific study and to explain the relationships, a model business entity operating in Slovakia was selected for its needs, which is characterised by the following financial indicators. The data (Table 1) is obtained through the Finstat.sk web service and is aggregated for all operating units of the subject entity (158 units) in the structure according to the period under observation.

Table 1. Financial indicator of the business model entity

Year	Revenues	Costs	Profit	% Margin
2010	86 mil. euros	56 mil. euros	30 mil. euros	35%
2011	95 mil. euros	62 mil. euros	33 mil. euros	35%
2012	102 mil. euros	67 mil. euros	36 mil. euros	35%
2013	112 mil. euros	72 mil. euros	40 mil. euros	36%
2014	126 mil. euros	81 mil. euros	45 mil. euros	36%
2015	141 mil. euros	89 mil. euros	52 mil. euros	37%
2016	155 mil. euros	98 mil. euros	57 mil. euros	37%
2017	165 mil. euros	105 mil. euros	60 mil. euros	37%
2018	178 mil. euros	113 mil. euros	65 mil. euros	37%
2019	195 mil. euros	126 mil. euros	69 mil. euros	36%
2020	222 mil. euros	142 mil. euros	80 mil. euros	36%
2021	254 mil. euros	163 mil. euros	91 mil. euros	36%
2022	291 mil. euros	185 mil. euros	106 mil. euros	36%
2023	357 mil. euros	229 mil. euros	128 mil. euros	36%

Source: own processing according to Finstat.sk (2024)

Macroeconomic indicators monitored by the Statistical Office of the Slovak Republic are used to point out market signals that indicate a possible baseline situation for business entities. For the purposes of the scientific study, data from the DATAcube service are processed as part of the regression analysis.

Selected characteristics of consumer behaviour were interpreted based on secondary data from MEDIAN.SK using DataAnalyzer software. The data source is a field survey that was conducted between September 12, 2022 and April 2, 2023 through MEDIAN.SK's interviewer network. Respondents were selected to ensure representativeness per district and size of place of residence. The basis for this selection was the permanent resident population by districts and municipalities from the 2011 Housing Census. Further, representativeness in terms of age, gender, education, and nationality was ensured. Within municipalities, respondents were selected by quota sampling. The age range of the respondents is between 14 and 79 years and the sample size is 4,180 respondents (MEDIAN SK, 2023).

For the needs of the theoretical application of Hotelling's Law we have chosen the city of Bratislava because the model business entity has 17 units located in the city. The following figure illustrates the location of the units.

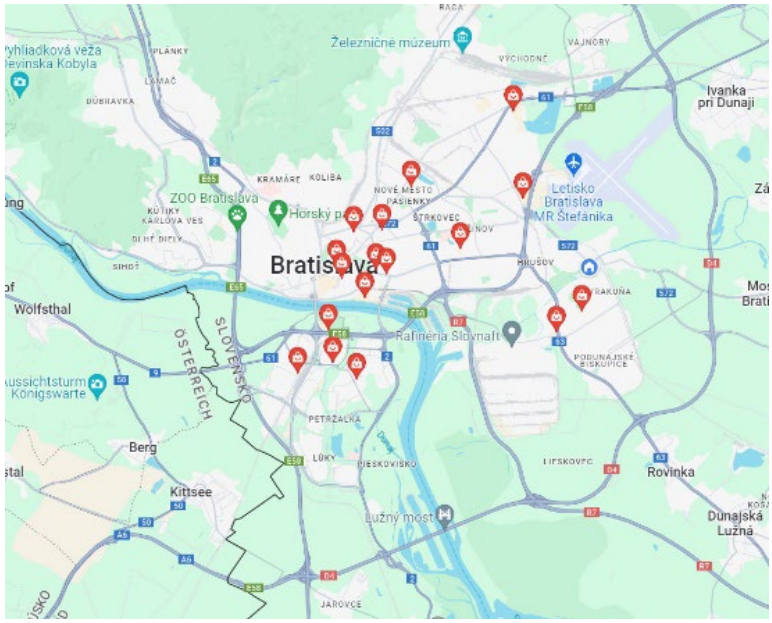


Figure 2. Location of business units on a map of Bratislava
Source: own processing according to Google maps (2024)

The city of Bratislava (the capital of the Slovak Republic) is administratively divided into 5 urban districts, 17 urban zones and 264 urbanistic localities (BRU – basic residential units), which are shown in the figure with population density.

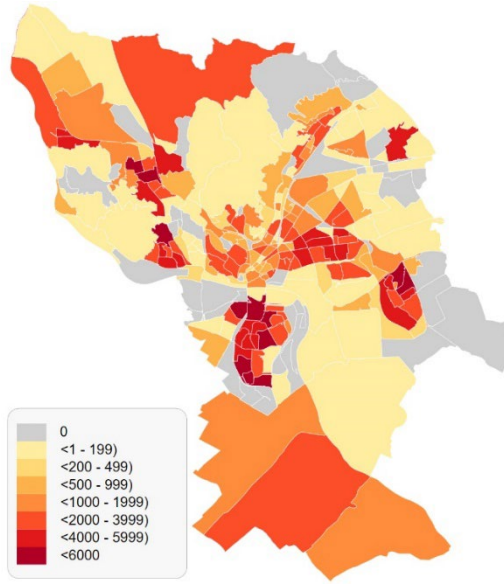


Figure 3. Population density of Bratislava
Source: Obce SR (2024)

3 Market Signals: Business Predisposition

The basic basis determining the prerequisite for achieving the prosperity of a business entity is the current economic situation of the market, which allows predicting the possible future development and impact on the financial indicators of the entity. One of the most important indicators is the performance of the national economy, as it determines the economic potential of the business unit's purchasing gradient. If the performance of the national economy is at a low level, the performance of the business entity in terms of turnover and sales is jeopardised. From this point of view, it is important to know the current development of the national economy and to be aware of the effects that may arise due to its cyclical development. The key indicators are gross domestic product, household consumption and sales in the sector under consideration. By comparing these indicators, the economic impact on the future performance of the retail unit can be identified. From an economic point of view, it is useful to further highlight the interdependence of sales and household consumption indicators. If economic performance increases, as expressed by the gross domestic product indicator, household consumption increases, which ultimately means that retail sales increase.

Considering the above facts, we use the attributes of the model business entity's sales and the retail sales achieved in Slovakia over the period 2010 to 2023 to verify the interdependence. For this purpose, regression analysis can be used to unravel the functional relationship of interdependence between the explanatory variable (sales of the business entity – the dependent variable) and the explanatory variable (total sales in retail). If the assumption of interdependence between the variables is to be confirmed, a change in total retail sales must trigger a change in the sales volume of the business unit. By using a regression model, it is possible to demonstrate the correlation demonstrated by the linear model. Through the calculation, we obtain a point estimate of the smoothing line, whose equation has the form: Revenues= -2,7E8 + 0,0209*Revenues of Slovak Retail Trade.

From the value of the regression coefficient, it can be concluded that if the value of total retail sales increases by 1 billion euros, the sales of the model business unit will increase by 2.09 million euros. The above statement is verified at the 95% confidence interval. The following graph interprets the position of the regression line.

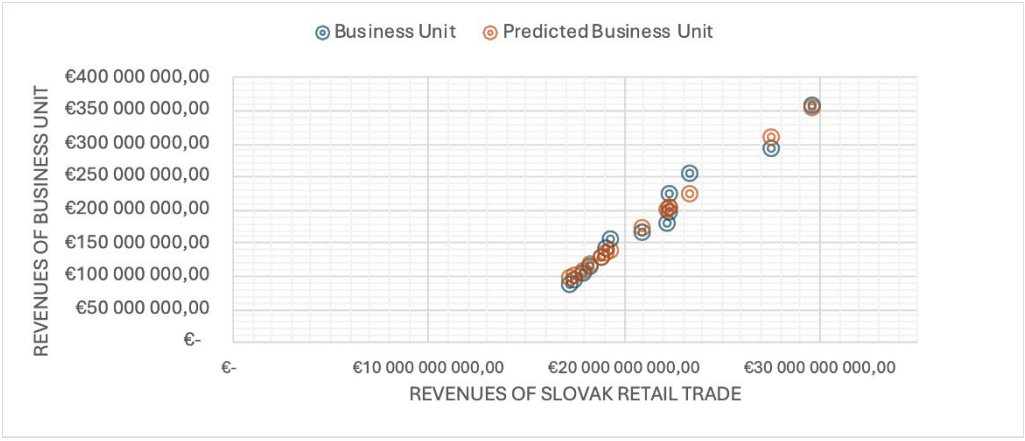


Figure 4. Plot of fitted model
Source: own processing according to DATAcube (2024)

In the above example, it is possible to observe the phenomenon that if the performance of the national economy expressed by the gross domestic product indicator is growing, the sales of business entities are growing, which creates a basic prerequisite for the possible success of entrepreneurial activities, since household consumption is also growing. In other words, consumers are much more willing to transform their disposable income into the purchase of goods and services. In this situation, synergies in communication and product strategy

are desirable. Targeted communication is a tool for eliminating competitive influences and strengthening market position.

However, it must also be stressed that this is a model example, and the financial performance of a business unit is influenced by a great many factors. The above view is only simplified for the purposes of understanding the importance of the economic market situation.

4 Insight Bridge: Consumer Metrics and Marketing Communication

The economic prosperity of a business entity is furthermore significantly influenced by the target group of customers and their actual implementation in the form of purchase transactions. From this perspective, it is important for a business to know the consumer behaviour of the target group, which can be influenced in time and space by marketing communication. For this purpose, the characteristics of the consumer or customer, from which purchase decision-making is derived, as well as the activities associated with the whole process of consumer behaviour, are used. The attributes describing consumer characteristics include geographic, demographic, economic, social, and personal characteristics. Geographical indicators can be understood mainly as the location of the consumer's residence, while demographic indicators identify mainly the consumer's age, gender, and education. Economic indicators point to the consumer's purchasing power, social indicators mainly point to the consumer's position in society and the reference groups that influence it. Personality indicators represent a kind of black box of the consumer, which formulate opinions and practices in the implementation of the purchase.

In terms of the interaction between marketing communication and consumer behaviour, knowledge of customer characteristics is key to identifying the characteristics of the target market. Standardly, most authors list five basic stages of the consumer decision-making process: problem recognition, information search, evaluation of alternatives, purchase, and post-purchase behaviour. Blackwell et. al. (2006) develop the above basic decision-making process scheme by adding two more steps. They specify the buying behaviour as separate stages, namely: consumption, post-consumption evaluation, divestment, or product disposal. It is clear from the decision-making process that the buying process starts long before the actual purchase and the consequences are felt long after the purchase decision. The model captures the full range of considerations, although the consumer may not go through all five stages. Some activities may be skipped or reordered, meaning that they may not form a continuous process. The spectrum of consumer approaches in the purchase decision process is quite broad and depends on the type of purchase decision. It may be a careful analysis or an impulsive behaviour. The different levels of the consumer's approach to solving the purchase decision are influenced by factors that Kulčáková et. al. (2005) define as:

- the degree of differentiation of the considered alternatives for satisfying the need,
- the influence of time,
- involvement in the purchase.

While economic theories of consumer behaviour lean more towards the rationality of consumer behaviour in a space with perfect competition, sufficient and accurate information, with an emphasis on choosing the best alternative, current research points to the prevalence of subconscious, habitual, or routine consumer behaviour. Some foreign authors, relying on the latest forms of consumer behaviour research and current findings from neurobiology and cognitive psychology, point out that up to 90% of human behaviour is influenced by the subconscious. This implies that only 10% of decisions are based on rational thought, not including purchases.

From the above, it can be concluded that the issue of consumer behaviour is quite broad in terms of both the depth and breadth of its investigation. Therefore, for the purposes of this scientific study and its application, we decided to select 4 evaluation attributes – characteristics of the target group of customers of the model subject in

terms of the purchase decision algorithm. The attributes in question have a significant impact on the identification of the intention of communication activities and the estimation of the market potential within the action radius of the business unit.

Selection Factors for Making a Purchase

The attribute in question can be used to describe the significance of the factors that play a role in the selection of a business unit and become the content motive for the design of the communication strategy. The following figure shows that for the target group of the model business entity, the most decisive factors for purchase choice are mainly the quality of the goods/service (49%), location/availability (14%) and price (14%). The above percentages reflect the most significant attributes of the share structure within the attribute under study.

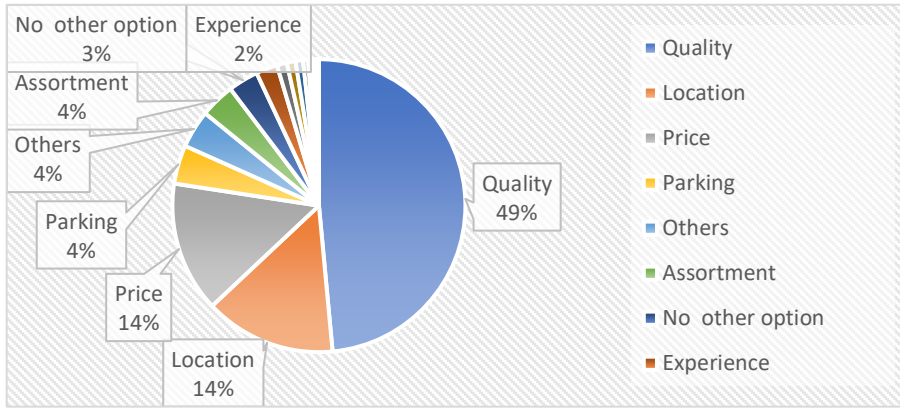


Figure 5. Factors of business unit selection

Source: own processing according to DataAnalyzer (2024)

Purchase Transaction Amount

This attribute identifies the amount of the average purchase transaction per visit. Based on this data, the market potential of the business unit can be predicted. The following figure shows the purchase transaction amount of the target group. The graph shows that the most frequent occurrence is in the 65 – 100€ category (23%), but at the same time, there are also expenditures in the 35 – 50€ category (21%) and 50 – 65€ category (20%), respectively. For the sake of interpretation, we base our findings on the average purchase transaction amount of 56.69€.

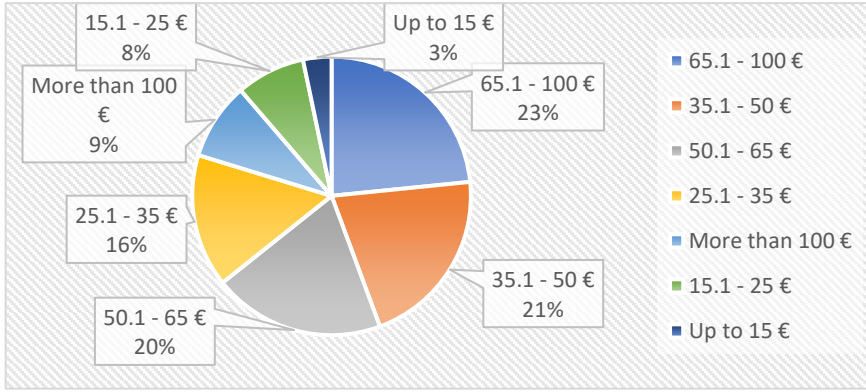


Figure 6. Transaction amount

Source: own processing according to DataAnalyzer (2024)

Distance

Distance is an attribute that represents the willingness of customers of a target group to travel a certain distance to make a purchase at a particular business unit. In terms of further use of this attribute, the data interprets the size of the action radius. When making a purchase, the target group in question travels 1.1 to 5 km. That distance is covered by 36% of the respondents of the target group. The following figure shows the proportion of distances that respondents travel when making a purchase. The average distance is 4.25 km.

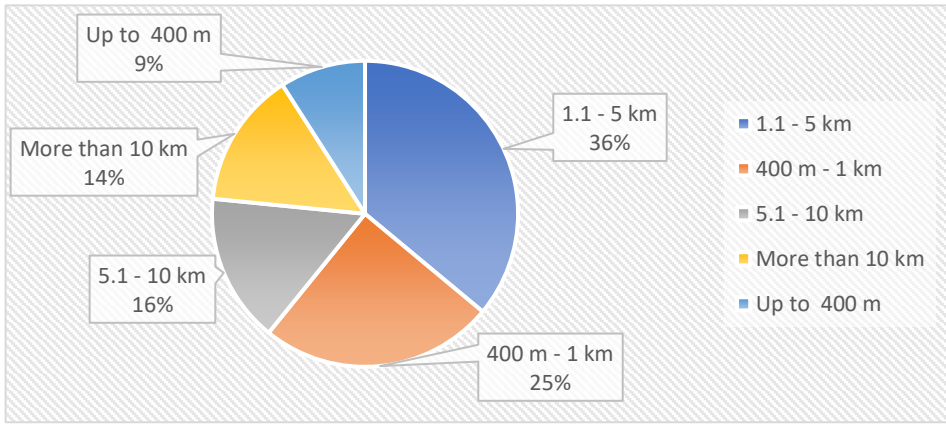


Figure 7. Distance of purchase

Source: own processing according to DataAnalyzer (2024)

Frequency of Purchases

The frequency of purchases, as the last attribute selected, interprets the frequency of customer visits and, in context with the transaction amount, indicates the market potential of the business unit. The following figure, which identifies the frequency of purchases itself, points to an interesting finding. As many as 48% of the respondents of the target customer group make purchases every day or 4 – 6 times a week (26%).

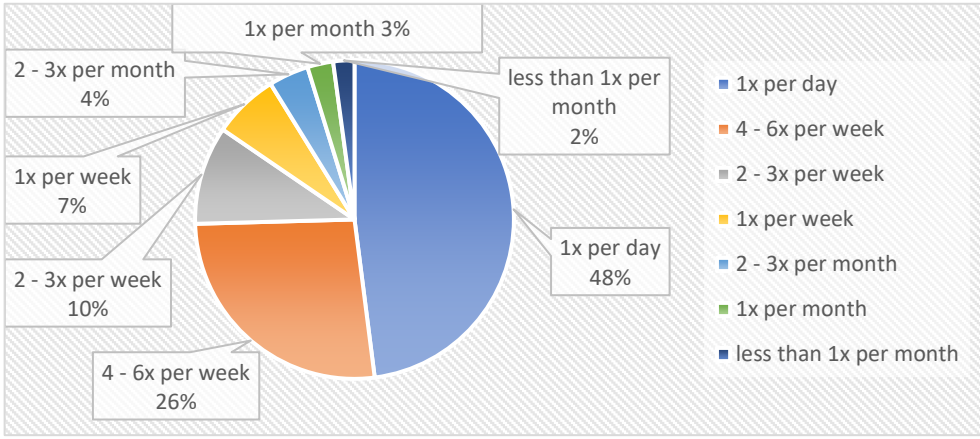


Figure 8. Frequency of purchase

Source: own processing according to DataAnalyzer, (2024)

The above findings play an important role in determining the size of a retail unit's action radius and help to identify its market potential as well as the level of likelih&ood of business unit or point of purchase selection. For expressing probability of shopping place selection, it is necessary to use the probability theory and total conjunction

of action radius of competition business units. The first step requires identifying the probability of possible visits within a business unit's action radius. However, it is possible to approximate an action radius via a circle, it is suitable to choose geometrical probability which can be defined as the probability of random effect A, where it is true that a randomly chosen point of aggregate Ω is the point of aggregate G. By modifying this relationship for this research study, we obtain the following formula.

$$P(A) = \frac{\mu(G)}{\mu(\Omega)} \quad \rightarrow \quad P(A) = 1 - \frac{\sum S_x}{\pi r^2}$$

Apart from the stated relation it is needed to identify shopping probability in the mentioned retail store. It means defining the probability of competitor business unit visits. To define the relationship, it is advisable to use the distribution function of discreet random variable X which is stated as the total probability of all possible random variable values X. To support this, we can use following relation.

$$F(x) = P(X \leq x) = \sum P(X) \quad \rightarrow \quad P(X) = \binom{n}{x} (1 - P(A))^x * P(A)^{n-x}$$

Where n is the number of business units, x stands for parameter of business unit visit form the perception of size order particular conjunctions, values are x = 0,1,2,3 ... n. (value 0 means that competitor unit is not visited, value 1 means visit of competitor unit with the biggest conjunction, etc.) P(A) is an approximately of business unit visit.

The actual area of operation of the business unit results from the relationship of the shop versus other, assortmentally identical, establishments. The acceptable availability of an outlet for a customer is very individual. It differs mainly in the type of assortment, transport and economic opportunities for the customer and their habits (Cimler & Zadražilová, 2008).

5 Local Leverage: Using the Paradox for Competitive Advantage

As already indicated, the location of the business unit is also crucial from the point of view of economic prosperity, as it directly determines its distance accessibility in terms of serving the target group of customers, thus directly influencing the market potential and revenue achievement. Several rules, principles or methods can be used to decide on the location of business units. In practice, however, they are often based on the real possibilities of the space. For this scientific study, we want to highlight the application of the paradoxical principles of Hotelling's Law.

To illustrate its application, it can be observed that often, e.g., hotels, gas stations, banks are located close to each other even though the space would seem large enough for them to be spaced differently. Even clothing outlets tend to be on the same street, or fast-food outlets of different chains are almost always next to each other. Locating the same or similar outlets in the same place or location may evoke an irrational decision and raise the thought that why are the actors voluntarily subjecting themselves to increased competitive influence.

There are several theories and location models that deal with even spacing so that traffic is equally available to customers. Such an even distribution may evoke the idea of market equilibrium, but this is not always the case. In practice, the models mentioned above are used to locate distribution centres or service points that consider a certain catchment area, and their choice of location is not subject to market principles. The following figure illustrates the principle of a given layout, which illustrates the fact that given stores will serve different customers from the surrounding area.

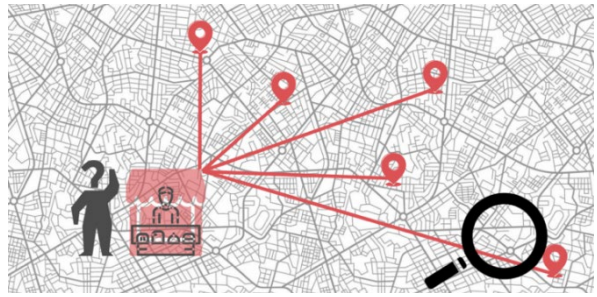


Figure 9. Customers around a store
Source: Gaëtan Fournier et al. (2020)

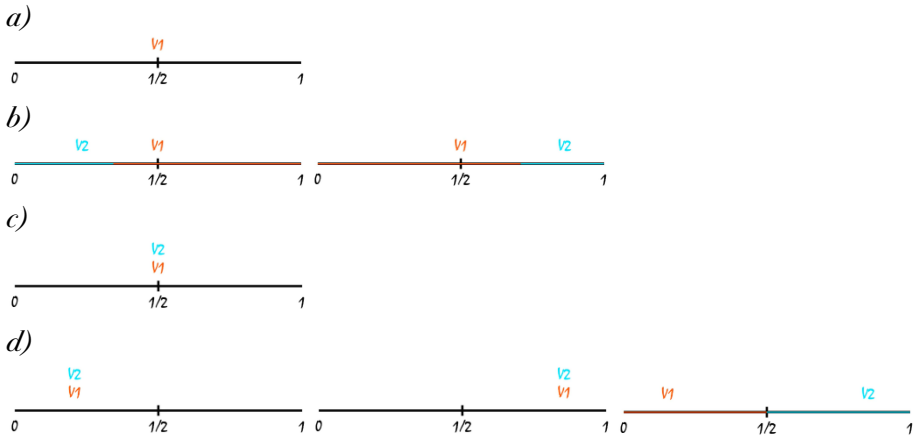
If each store served its own customers and these stores were evenly located in the area, this would help to minimise transportation costs for individual customers. However, stores of the same character are in the same place or street as illustrated in the following figure.

Figure 10. Realistic location of similar stores
Source: Gaëtan Fournier et al. (2020)

As noted above, it is the issue of the Hotelling's Law that is most often explained at two ice cream stands on a small beach. The following figure illustrates a situation where an ice cream stand (V1) is located on a beach, represented by a line from 0 to 1 – line "a". The given line represents the whole beach where customers are distributed and, since the stand is in the middle of the beach, there is a certain uniformity from both ends of the beach.

If another ice cream vendor came to the beach and placed a stall (V2) somewhere other than in the middle, it would still have fewer customers than stall V1 (shown in colour in line "b"). As a result, the only reasonable location for stall V2 is where stall V1 is located – line "c". Both stalls sell the same ice cream, at the same price, and so if there are already two stalls on the beach, they both expect to get as many customers as possible, but since there are two stalls and they share a beach (V1 + V2 = 1), they assume at least half (≥ ½). It follows that in equilibrium they can have exactly one half of the customers, which is described by the relation: V1 ≥ ½ and V2 ≥ ½, and if V1 + V2 = 1, then V1 = ½ and V1 = ½ The given relationship describes the reason why the only reasonable location for stall V2 is where stall V1 is located, or at the same distance from the centre of the beach as V1, as illustrated by the line "d".

Figure 11. Hotelling's Law



Source: Game Theory 101 (2011)

To optimise, it would be necessary to appropriately select the centre of the BRU and determine its coordinates (latitude and longitude). Subsequently, through a traffic location model in the Euclidean plane, it was possible to determine the approximate location where the traffic serving the selected BRU should be established. These centres of each BRU would represent individual vertices according to graph theory (hereafter referred to as x^i).

The location of the traffic essentially depends on the distance of its shortest link as the crow flies from the other vertices in the considered planar network (i.e., the BRU centres). This distance represents the length of the line segment between the location point and the vertex in question.

One of the location options is to locate the traffic based on an optimisation criterion that represents the total aerial distance from the potential location of the traffic to each BRU (vertex). Using the above criterion, the service facility can be located based on the air distances. In this way, the point (centre) with the overall shortest distance from the initial vertex to all n other vertices (subscriber vertices) can be found. The problem formulated in this way can be formulated as the problem of finding a free extremum:

$$f(x_1^0, x_2^0) = \sum_{i=1}^{n} \sqrt{(x_1^i - x_1^0)^2 + (x_2^i - x_2^0)^2} \rightarrow \min$$

The formulated problem of the optimal location of a point can be illustrated by means of a figure showing three existing stores (BRUs). The optimally located traffic (point) x^0 is located at the centre with coordinates $[x_1^0, x_2^0]$. The distance d (x^i, x^0) is computed according to the L2 metric, i.e., by forming a square, which is evident from the figure. In doing so, we need to minimise the sum of all distances d (x^i, x^0) (i = 1, 2,...n), where n is the number of BRUs.

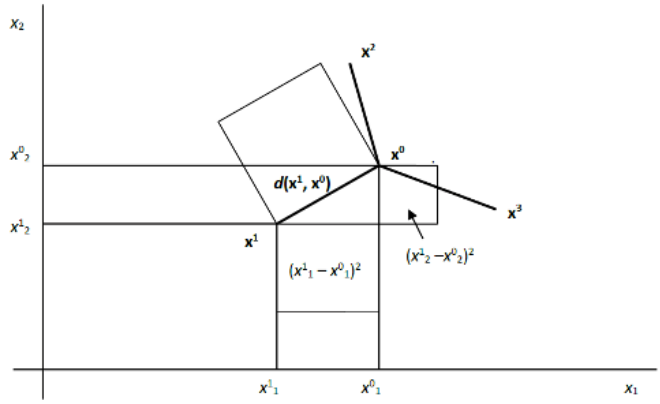


Figure 12. Principle of calculating the optimal location of a point in the area
Source: Brezina et al. (2020)

However, not all vertices are equally important for locating a new object. According to their importance (significance) they can be rated by weights that can represent the number of inhabitants. In this way, the minimum of the sums that consist of the products of the weights and the distances can be found. The above problem can be formulated for n vertices with assigned weights w_i ($i = 1, 2,...n$)as follows:

$$f(x_1^0, x_2^0) = \sum_{i=1}^{n} w_i \sqrt{(x_1^i - x_1^0)^2 + (x_2^i - x_2^0)^2} \rightarrow \min$$

The solution computed in this way gives the point with the overall shortest distance from the specified operation x^0 to the individual vertices x^i with assigned weights w_i ($i = 1, 2,...n$). The example below deals with three business entities operating in the same segment with approximately the same product range, which have individual operations located within the city of Bratislava. All three provide different brands and, indeed, all also have their own private labels and thus their stores are suitable for this kind of scientific comparison. The stores of the above-mentioned businesses are marked in the following figure – a territorial map of the city of Bratislava.

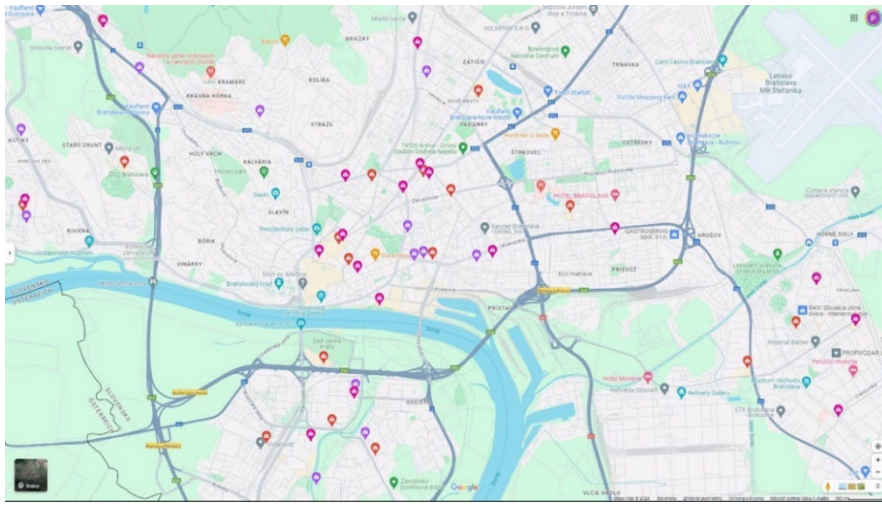


Figure 13. Location of selected stores on the map of Bratislava
Source: own processing according to Google Maps (2024)

From the picture and the location of the subject stores, which are the most frequented in the segment, their placement was based mainly on the possibilities of the urban plan and historical assumptions. On closer inspection, it can be concluded that Hotelling's Law does not best represent the location of the stores in the Bratislava-Karlova Ves district. Here it is possible to observe a situation where the location of stores does not exceed 300 m.

Finding the optimal location of the stores based on optimisation methods and choosing the above mathematical approach would be based on the data according to BRU. The table below shows the selected BRUs for the Bratislava-Karlova Ves district. 7 BRUs were selected to represent the urban development.

Other BRUs that are sparsely populated and have 0-500 inhabitants were abstracted. The BRUs were also selected due to the accessibility and coherence of the selected area (the unselected areas are separated from the selected BRUs by natural barriers, e.g., a hill, and there is no direct traffic communication between them).

Table 2. Basic residential units of Karlova Ves

BRU	Attitude	Longitude	Population
Kútiky	48.161631	17.048760	7,147
Dlhé diely – West	48.152700	17.041795	3,793
Dlhé diely – East	48.149449	17.050348	5,396
Dlhé diely – Centre	48.154457	17.047605	4,725
Dlhé diely – North	48.154866	17.051972	2,633
Riviera	48.151448	17.058720	4,019
Polyclinic – Karlova Ves	48.156672	17.056266	3,665

Source: own processing according to Obce SR (2024)

The source code and output in the Python programming language to solve the problem of locating traffic in Euclidean space would look like this:

```
import numpy as np
from scipy.optimise import fmin
def f(x):
 function=0
for i in V:
 function += w[i]*(((latitude[i]-x[0])**2+(longitude[i]-x[1])**2)**0.5)
 return function
BRU=["Kútiky","Dlhé diely – západ","Dlhé diely – východ","Dlhé diely – stred","Dlhé diely – sever","Riviera","Poliklinika KV"]
latitude=[48.161631,48.152700,48.149449,48.154457,48.154866,48.151448,48.156672]
longitude=[17.048760,17.041795,17.050348,17.047605,17.051972,17.058720,17.056266]
w=[7147,3793,5396,4725,2633,4019,3665]
n, V = len(BRU), set(range(len(BRU)))
xopt, fopt, iter, funcalls, warnflag = fmin(f,np.array([0,0]),full_output=True)
print(xopt, fopt)
```

Based on the calculation, the point that determines the optimal location of the plant, given the coordinates of the centres of the individual BRUs and their populations, would have the following coordinates: 48.15475332 17.05028888 (shown as a black cross in the figures). The given point is plotted in both maps of the urban area with the selected BRUs, both according to the population and according to the location of the stores of the three selected business entities. The suitability of the location of these shops is demonstrated by the fact that the nearest of the aforementioned stores is only about 150 m from the calculated point. This fact points to a situation where it is possible to combine the two theoretical approaches mentioned above, which should result in the maximum possible

use of the location to maximise performance in terms of revenue generation and the application of targeted communication activity.

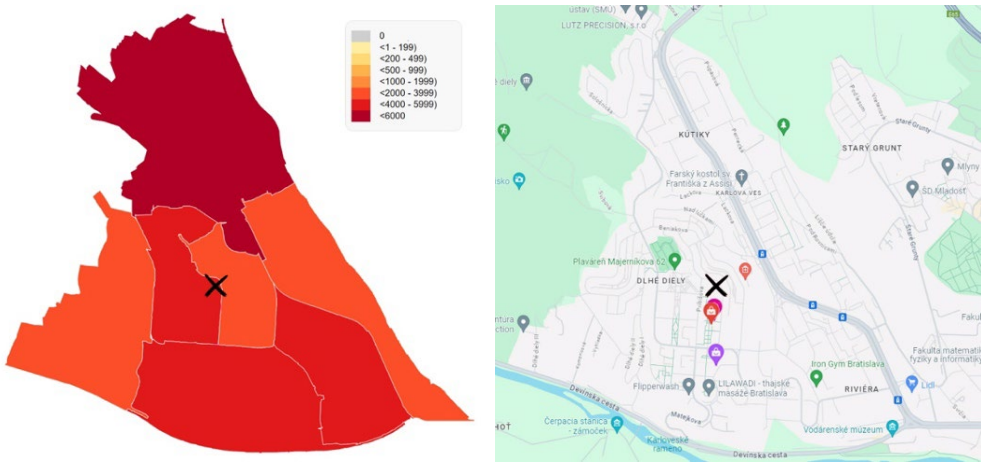


Figure 14. Optimum point location
Source: own processing according to Google Maps (2024); Obce SR (2024)

6 Conclusion

The study presents a view on the management of the efficiency of business activities, which is often highly dependent on location, i.e., the place in which the business unit operates, the characteristics of the consumer behaviour of its target group, the product and communication strategy and, ultimately, the overall market economic situation.

In conclusion, it can be noted that knowledge of the current market situation and consumer behaviour makes it possible to draw up a set of effective marketing communication objectives for a business entity, to ensure the highest possible degree of their fulfilment. This starting point captures the process approach of marketing communication and consists of established steps: selecting the target group, setting communication objectives, designing communication, choosing communication channels, setting the communication budget, deciding on the communication mix, and communication outcomes (Kotler & Keller, 2013). Their number or terminological naming may, of course, differ from the theoretical or practical starting points chosen by the author or authors. Hence, it is important to identify the achievable goals before the actual communication activities are determined and to tailor the application of communication tools to the target group according to the defined characteristics of consumer behaviour that can be used to achieve the fulfilment of the strategic goals in the form of purchase transactions.

The above directly influences the characteristics of the target customer and the size of the buying gradient. The composition of the communication mix must then consider the predispositions and resource constraints in question, which are determined by the size of the target market, its potential and the profitability of the financial and economic indicators themselves. This limiting factor has a major impact on the composition of the communication mix and therefore the correct choice and targeting of individual instruments is essential. It is not necessary to forget about the measurement of communication results in the form of identifying the amount of realised transactions in the form of sales – measuring sales results (e.g., comparing the volume of product sales before, during and after the communication campaign) and the communication effect (e.g., spontaneous and promoted knowledge, brand credibility, change in public attitudes towards the company and its brands) (Kollárová, 2013).

By applying Hotelling's Law, the sense of positioning business units to competitors has been demonstrated, as the effect of communication activities of all involved business units is multiplied, resulting in a positive effect in the form of increasing the frequency of visits and revenue growth.

Acknowledgement: APVV-22-0469 Roadmap of a Digital Platform Providing AI Automation of Decision-Making Processes in the Field of Communication Strategy.

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