THE IMPACT OF THE POSITION OF SHOPPER MARKETING STANDS WITHIN A STORE ON SHOPPER PURCHASE BEHAVIOR

Abstract

Purpose – Shopper marketing stands, shelves, and product exposure are types of shopper marketing activities which have the potential to influence the shopping behavior of shoppers and increase revenues for both retailers and manufacturers. This study aims to show the performance of shopper marketing stands located in various zones within a store. The main aim of the paper is to identify the impact that the position of shopper marketing stands has on shoppers’ buying behavior.

Design/Methodology/Approach – The method of physical observation was employed as a primary research method on a sample of 666 shoppers in several supermarkets. The observer noted whether the shoppers walked by, stood by, or interacted with a shopper marketing stand in a particular zone of the store. Four zones were identified with respect to shopper marketing stands: entry zone, zone along the store, central zone, and cash or check-out zone. The dependency between the defined variables was evaluated using the Pearson’s Chi-Square test of independence in IBM SPSS statistical software.

Rezultati i implikacije – Rezultati istraživanja otkrivaju statistički značajan odnos između lokacije standova i kupovnog ponašanja. Položaj standova unutar prodavaonice utječe na kupovno ponašanje.
Findings and Implications – The study found a statistically significant relationship between the location of shopper marketing stands and the shoppers’ buying behavior. The location of special shopper marketing stands within a store has the potential to slightly or moderately affect the possibility of purchase. The results also demonstrate the performance of shopper marketing stands in particular zones of a store.

Limitation – The research focused on just one of many shopper marketing tools, namely the location of shopper marketing stands. Future research might focus on other shopper marketing tools, such as financial advantage, particular types of shopper marketing stands, the visual aspect of shopper marketing stands, etc.

Originality – The empirical results of the study will help retailers to monetize zones containing shopper marketing stands within a store more precisely and manufacturers to effectively consider the possibility of sales support through the use of special shopper marketing stands.

Keywords – product exposure, retail, shoppers' buying behavior, shopper marketing

Ograničenja – Istraživanje je usredotočeno na samo jedan od mnogih marketinških alata usmjerenih na kupce, odnosno na lokaciju prodajnih štandova. Buduća istraživanja mogla bi se usredotočiti na druge marketinške alate usmjereni na kupce kao što su financijska prednost, odredena vrsta prodajnih štandova, vizuali štandova itd.

Doprinos – Rezultati empirijskog istraživanja pomoći će trgovcima na malo da preciznije unovče zone sa štandovima unutar prodavaonice, a proizvođačima da učinkovito razmotre mogućnost podrške prodaji kroz posebne štandove.

Ključne riječi – izlaganje proizvoda, maloprodaja, kupovno ponašanje, shopper marketing
1. INTRODUCTION

Shopper marketing is a relatively young, although rapidly growing marketing discipline. In addition to its ability to generate additional sales and bring in additional revenue for particular subjects, it can also modify shopper behavior. Shopper marketing focuses on shoppers as individuals by examining their purchasing decisions and analyzing the preferences and expectations of individual consumers, while aiming to provide an enhanced shopping experience for shoppers. The positioning of shelves and the layout of products on those shelves act as a strong stimulator for consumer satisfaction and may serve as a purchase trigger. This paper seeks to examine the performance of shopper marketing stands in various locations within a store. By doing so, it aims to identify the impact that the position of shopper marketing stands has on shoppers’ buying behavior. A comprehensive literature review of relevant and highly cited research papers indexed in Web of Science databases revealed a research gap in this respect, which helped define the topic of this paper. None of the reviewed papers examined the performance of special stands in various locations within a store in terms of shopper behavior. Motivated by the need to fill this gap, the authors were driven to discovering new insights within the area and contributing to a topic that, based on the number of citations, seems to be highly in demand. The research questions motivating the research were defined as follows: Is there a dependency between the position of shopper marketing stands and shoppers’ buying behavior? If there is such a dependency, what role does the particular position of those stands play? And what kind of behavior do shoppers show? The method of physical observation in the defined stores was identified as the most relevant research method. A detailed process of data collection and data evaluation is described in the methodology chapter of the paper. The paper is divided into five chapters. The introductory chapter provides a presentation of the topic, its purpose and the motivation behind it, contains a description of the research problem and research questions, and summarizes the paper’s structure. The second chapter presents the literature review, which enabled the authors to identify the research gap. The methodology chapter defines the main aim of the paper, describes the process of observation as a primary research method of data collection and describes the use of SPSS software for data evaluation. The findings and implications chapter presents the results of the research in table, graphical, and text form. The concluding chapter summarizes the findings of the paper and introduces the limitations of the research, implications for retailers and manufacturers, and suggestions for further research.

2. LITERATURE REVIEW

2.1. Discipline of shopper marketing

Shopper marketing is a relatively new marketing discipline, which can effectively influence the customer journey and purchase behavior. It focuses on planned and unplanned shopping and should be perceived as a strategic marketing approach. “Recently, many commodity groups have shifted promotion expenditures from generic advertising to non-advertising activities such as in-store promotion programs” (Chung, Schmit, Dong & Kaiser, 2007). Such marketing often goes beyond the store environment and begins early before a product is placed on a store shelf. “Shopper marketing has emerged as a key managerial practice among manufacturers and retailers, who are eagerly embracing innovations in the area” (Shankar, Inman, Mantrala, Kelley & Rizley, 2011). Thus, shopper marketing is not only about the retailer, but also about the manufacturer and their cooperation. “Manufacturers should collaborate with retailers and push the store-specific shopper-marketing instruments in a favorable direction through information sharing and tailoring of their marketing program to individual retailers” (Lamey, Deleersnyder, Steenkamp & Dekimpe, 2018). As
shopper marketing is evolving, its evolution can currently be broken down into two main phases. Recent findings of academic papers have pointed to two dimensions of shopper marketing: Shopper Marketing 1.0 related especially to in-store activities and Shopper Marketing 2.0 extending the activities out of store by focusing on the mobile and digital environment (Shankar, 2014). Mobile marketing can even affect in-store purchases. Results of studies “show that mobile phone use (vs. non-use) and actual mobile phone use patterns lead to increased purchases because of more time spent in the store” (Grewal, Ahlbom, Beitelanspacher, Noble & Nordfält, 2018). Shoppers often browse through mobile shopping opportunities on their way to the store and analyze offers on their way home by looking into their smartphones. Such behavior has become increasingly common and can even endanger pedestrians (Mikusova, Wachnicka & Zukowska, 2021). In shopper marketing approaches, it is necessary to observe the customer and map their shopping behavior. “Customer journey analysis should understand and map the journey from the customer perspective and, therefore, requires customer input into the process” (Lemon & Verhoef, 2016).

2.2. In-store product exposure management

The placement of a product within a store or on a shelf is one of the crucial triggers of the purchase decision-making process. “Consumer privacy during a shopping and control of shopping journey are improving retailer outcomes” (Esmark, Noble & Breazeale, 2017). The placement of products and shopper marketing stands can ensure the privacy and control of a shopper. The satisfaction of a customer within a store is necessary because of its positive effect on repurchase behavior, which is contingent on the moderating effects of convenience, competitive intensity, customer involvement, and household income (Seiders, Voss, Grewal & Godfrey, 2005). Satisfaction can also be supported by appealing to one’s mood, which can affect hedonic shopping values and in turn have a substantial impact on the consumers’ tendency towards impulsive buying (Parsad, Prashar, Vijay & Kumar, 2021). Another strong trigger for hedonic shopping behavior is the utilization of seasonality within a store. Seasonally adjusted shopper stands along an aisle have a strong impact on shopper purchases (Kuchta & Stanková, 2020). In-store marketing activities within modern shopping malls are implemented to normalize the purchasing behavior of shoppers (Dulsrud & Jacobsen, 2009). Shelf management in respect of the products placed within a store and their position on a particular shelf are a strong tool influencing the shopping decision-making process. Shelf customization and shelf reorganization can have a modest or strong impact on product sales, while the location of a shelf has a significantly greater impact on sales than interventions to the shelf (Drèze, Hoch & Purk, 1994). Interventions with regard to shelf space management have a significant effect on the sale of individual products (Adam, Jensen, Sommer & Hansen, 2017). Visual attention in respect of a product can lead to stronger interest in a purchase even in the target group of frequent shoppers and produce a shift effect in shoppers, who are willing to switch to another brand for a price. Another study has found that “in-store attention is not always sufficient to drive sales. For example, top- and middle-shelf positions gain more attention than low-shelf positions; however, only top-shelf positions carry through to brand evaluation” (Chandon, Hutchinson, Bradlow & Young, 2009). The way products are displayed, along with information provided on the packaging and information panels, or a new shelf can positively influence the purchase of a specific category of a product (Grandi, Burt & Cardinali, 2021). Moreover, the placement of products within a store has a significant effect on brand equity and behavioral loyalty, which represent important inputs in the purchase decision-making process (Harihanan, Desai, Talukdar & Inman, 2018). Store space management and product display have a further positive impact on the impulse-buying tendency. “Store displays as marketing tools directly
influence consumers’ impulse buying tendency and therefore, they are one of the most powerful tools for sales increase” (Dujak, Botkuljak & Franjkovic, 2018). Unplanned shopping decisions may also be influenced by way of shopper marketing approaches. Namely, product category and demographic factors also affect the decision-making process within a store. “Moreover, findings reveal that the baseline probability of an unplanned purchase is 46%, the contextual factors can drive this probability as high as 93%” (Inman, Winer & Ferraro, 2009). Standard aisles often feature a regular offer of products, so interventions in such an offer can drive sales of underselling products. For instance, the results of a recent study show that the placement of non-meat products in an aisle with meat products increased sales of non-meat products by about 1/3 compared to the previous sales volume (Piernas et al., 2021). Good availability and more prominent positioning of healthy foods can even help shoppers with their diet and obesity (Shaw, Ntani, Baird & Vogel, 2020). “Placement strategies can significantly enhance the sales of healthier items in several food and beverage categories. Such strategies can help with positive public health effects in communities with the greatest risk of obesity” (Foster et al., 2014). Information in the vicinity of or directly on products in aisles may also trigger changes in planned shopping; however, it is important that the information is visible, simple, concise, and short (Kalnikaitė, Bird, & Rogers, 2013). Modelling of shelf management which considers “multiple attributes of a shelf, segment, and product, as well as product capping and nesting allocation rule, is of high practical relevance. It allows retailers to receive higher store profits with regard to the actual merchandising rules” (Czerniachowska, Sachpazidu-Wójcicka, Sulikowski, Hernes & Rot, 2021). Given that the reallocation of shelves and of products on those shelves can reduce out-of-stock events, the location of products within a store can secure even sales (Frontoni, Marinelli, Rosetti & Zingaretti, 2017). Shelves at non-standard locations within a store can positively influence product visibility, sales, and the shopper experience, whereas experimenting with the height of specific shelves can boost profit from promoted products by around 10% (Karki, Guthrie & Parikh, 2021). Another study has found the shape of shelves to be crucial for sales success. A shelf layout at 90 degrees, while possibly limiting the shopper’s vision of shopper, however, can expose more products in an untraditional way, thus leading to significantly higher profits for the retailer (Mowrey, Parikh & Gue, 2018). Methods of shelf space allocation are frequently implemented in shops to increase product sales and profits. Many algorithmic solutions have been developed to solve this problem. One of the most recent is the teaching-learning-based optimization (TLBO) (Chen, Weng & Liu, 2020). Several authors are currently approaching this research area from a mathematics, statistics, and algorithmic point of view. Examples of this are recent studies conducted by authors such as Czerniachowska et al. (2021); Kim and Moon (2021); Ishichi, Ohmori, Ueda, and Yoshimoto (2019); Flamand, Ghoniem, Haouari, and Maddah (2018); Rabbani, Salmanzadeh-Meydani, Farshbaf-Geramayeh, and Fadakar-Gabalou (2018); Ghazavi and Lotfi (2016); Tsai and Huang (2015), etc.

2.3. Influence of information systems on shopper marketing

The discipline of shopper marketing, along with shelf management, has gained such great popularity and become so effective that it has outgrown the offline environment and made its way into e-commerce as well (Childers, Carr, Peck & Carson, 2001). In following trends and making use of the online environment and information technology in the decision-making process within its approaches, shopper marketing is currently experiencing a shift from mostly observed data to the utilization of statistics and big data. The enormous impact of big data, machine learning, and artificial intelligence can, with the proper processing and approach, boost the digital transformation of a business and significantly support revenue (Miklosik & Evans, 2020). “The importance of theory in guid-
ing any systematic search for answers to retailing questions, as well as for streamlining analysis remains undiminished, even as the role of big data and predictive analytics in retailing is set to rise in importance” (Bradlow, Gangwar, Kopalle & Voleti, 2017). The future of shopper marketing goes even further. Recent research focuses on four areas, which have the potential to significantly affect shopper marketing approaches in the near future, namely “consumer traits, product/service dimensions, mental models and social networks” (Grewal, Noble, Roggeveen & Nordfält, 2020). Another study describes five crucial areas, which support the four already mentioned: (1) technology to facilitate decision making, (2) visual display and merchandise offer decisions, (3) consumption and engagement, (4) big data collection and usage, and (5) analytics and profitability (Grewal, Roggeveen & Nordfält, 2017). Another study has utilized AR and VR technology as part of shopper marketing approaches and confirmed the positive impact of AR on customers’ choices and spending (Heller, Chylinski, de Ruyter, Mahr & Keeling, 2019).

3. METHODOLOGY

The research focused on the impact that the position of shopper marketing stands has on shoppers’ buying behavior. It was carried out on a sample of 666 shoppers using the method of physical observation in five selected supermarkets. The acquisition of observation data took place in the form of an audio recording on a smartphone. Subsequently, the recordings were analyzed and processed in Microsoft Excel. The obtained data contained the following types of information:

1. associated serial number of the observed shopper;
2. gender of the observed shopper;
3. location of the observed shopper’s marketing stand.

In the evaluation phase of the research, the data were processed into visual graphs for better interpretation and evaluated using the Pearson’s Chi-Square test in the SPSS statistical software. This statistical method was chosen in order to examine a potential relationship between shopper marketing practices and shoppers’ buying behavior. Data collection was conducted in the months of December and January. Given the months covered and the relatively high impact of the seasonality of the December period on the shopping behavior of shoppers, both seasonal and non-seasonal behavior was considered due to the distribution of research over two months. The locations observed within a store were the zones in the selected supermarkets where the shopper marketing stands were located at the time of the research. These shopper marketing stands contained different types of product categories. The most frequent types of shopper marketing stands were as follows:

1. pallets,
2. large baskets,
3. floor stands located in a different product section (the opposite is a “domestic” product section – the section in which a product is normally located, e.g., chocolate located in the aisle containing sweets, etc.).

At the time of the research, the four most frequent positions at the point of sale were identified in terms of the overall movement of shoppers within the retail stores examined, on the basis of which the observed locations of shopper marketing stands were chosen. The following areas can be identified as the most frequented zones:

1. entry zone – area located directly at the entrance to the store, which can also be identified as the beginning of the shopping mission of the shoppers;
2. zone along the store – area located near the entry zone and at the same time along the store, which is still relatively near the starting point of the shopping mission of the shoppers;
3. central zone – area located approximately in the center of the store, identified at the
same time as the middle of the shopping mission of the shoppers;
4. *cash zone* – area located near the cash registers of the store, identified as the gradual termination of the shopping mission of the shoppers.

To illustrate both the most frequented areas at the point of sale identified above and the individual locations of the shopper marketing stands, Figure 1 shows the layout of the observed supermarkets, which was similar in every tested store, along with the stands marked in red, positioned inside of the aisles.

**FIGURE 1: Position of shopper marketing stands**

Source: authors’ own processing.

The aim of the research was to shed light on how the identified locations of shopper marketing stands influence shoppers’ buying behavior. Based on the observation, the impact of these stands can be determined according to two key modes of shopper behavior, namely:

1. the observed object (shopper) passed by the stand, but did not pay any attention to it;
2. the observed object (shopper) noticed the stand and at the same time stopped at it:
   a) the observed object (shopper) noticed the stand, stopped at it, but did not take any product from it;
   b) the observed object (shopper) noticed the stand, stopped at it, and at the same time took a product from it.

Based on the data obtained, the dependence between the location of shopper marketing stands and the shoppers’ buying behavior was examined. To determine the existence of such dependence, the following null and alternative statistical hypotheses were formulated:

$H_0$: There is no statistically significant relationship between the position of shopper marketing stands at the point of sale and the shoppers’ buying behavior.

$H_1$: There is a statistically significant relationship between the position of shopper marketing stands at the point of sale and the shoppers’ buying behavior.
4. FINDINGS AND IMPLICATIONS

As seen from Table 1, the total number of shoppers observed among all the retail stores examined was 255 in case of the entry zone, and 198 in case of the zone along the store, while the central zone contained 76 individuals, i.e., the smallest number of observed shoppers due to the low incidence of shopper marketing stands. In the case of the cash zone, 137 shoppers were observed.

| TABLE 1: Position of shopper marketing stands – overview of the number of observed shoppers |
|---------------------------------|-------------|----------------|-----------------|
|                                 | Stopped by  | Passed by      |                  |
|                                 | Took        | Did not take   |                 |
| Entry zone                      | 149 (58%)   | 68 (46%)       | 106 (42%)       |
|                                 | 68 (46%)    | 81 (54%)       | 255             |
| Zone along                      | 108 (55%)   | 62 (57%)       | 90 (45%)        |
|                                 | 62 (57%)    | 46 (43%)       | 198             |
| Central zone                    | 42 (55%)    | 14 (33%)       | 34 (45%)        |
|                                 | 42 (55%)    | 28 (67%)       | 76              |
| Cash zone                       | 60 (44%)    | 18 (30%)       | 77 (56%)        |
|                                 | 60 (44%)    | 42 (70%)       | 137             |
|                                 |             |                 | 666             |

Source: authors’ own processing

The number of observed shoppers who stopped at the above shopper marketing stands and took or did not take any product against the number of those who just passed by the stands are shown in percentage terms in Graph 1. To determine the impact of the identified locations of shopper marketing stands on shoppers’ purchasing decisions, i.e., to test for the existence of a correlation among the categorical variables (where the individual locations of shopper marketing stands at the point of sale represent the independent nominal variable and shoppers’ buying behavior, defined as the buyers’ attention to these stands, represents the dependent nominable variable, as shown in Table 2), the statistical zero and the corresponding alternative hypothesis were formulated (see 3. METHODOLOGY).
To evaluate the dependence between the defined variables and thus to test the formulated hypotheses, Pearson’s Chi-Square test of independence was conducted. Statistical data processing was performed using the IBM SPSS statistical software. The results of the Pearson’s Chi-Square test are shown in the following table (Table 3).
The result of the Pearson’s Chi-Square statistical test of independence between the defined categorical variables “position of shopper marketing stands” and “shoppers’ buying behavior” is interpreted in the row entitled “Pearson’s Chi-Square” under the “Value” column. As seen from Table 3, the Chi-Square statistic has a value of 7.827. At the standard level of significance $\alpha = 5\%$ and at degrees of freedom $df = 3$, the critical value of Chi-Square is 7.815. The result is significant if this value (7.815) is less than or equal to ($\leq$) the value of the Chi-Square statistic (7.827). In this case, $7.815 < 7.827$, so we reject Hypothesis $H_0$ and at the same time accept the alternative Hypothesis $H_1$, according to which there is a statistically significant dependence between the position of shopper marketing exposures at the point of sale and shoppers’ buying behavior. The results can be interpreted very similarly if the p-value in the row entitled “Pearson’s Chi-Square” under the “Asymptotic Significance (2-sided)” column is taken into account. As can be seen from Table 3, the p-value is 0.050. The result is significant if this value (0.050) is equal to or less than the significance level $\alpha$ (0.050). In this case, 0.050 = 0.050, so Hypothesis $H_0$ is rejected and Hypothesis $H_1$ accepted. Given that the first part of the research focused on identifying the dependence between the nominal variables, one of which (position of shopper marketing stands at the point of sale) contains more than two categories (entry zone, zone along the store, central zone, cash zone), Cramer’s contingency coefficient ($V$) was used to test the strength of the dependence, with the value of the coefficient standing between 0 and 1 ($0 \leq V \leq 1$). Values close to 0 indicate a weak dependence between the variables, while the values close to 1 indicate a strong dependence between the variables.

### TABLE 4: Cramer’s contingency coefficient (Cramer’s $V$)

<table>
<thead>
<tr>
<th>Value</th>
<th>Approximate significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phi</td>
<td>0.108</td>
</tr>
<tr>
<td>Cramer’s $V$</td>
<td>0.108</td>
</tr>
<tr>
<td>N of valid cases</td>
<td>666</td>
</tr>
</tbody>
</table>

While Cramer’s contingency coefficient was again identified using the IBM SPSS statistical software, it is important to note that the basis of the calculation of Cramer’s $V$ is Pearson’s Chi-Square statistics. The results of this test can be interpreted using the table above (Table 4) based on the value specified in the row entitled “Cramer’s $V$” under the “Value” column. For the above dependence, this value is equal to 0.108. According to Cohen (1988), at the indicated de-
degrees of freedom \( df = 3 \), such a result indicates weak to moderate dependence, which means that the placement of shopper marketing tools at the point of sale has a weak to moderate influence on shoppers’ buying behavior.

5. CONCLUSION

Shopping within a store is no longer just about shopping. It is about the experience and perception of the store environment. Overwhelming product offers encourage efforts to be made by retailers, as well as manufacturers, to discover and analyze patterns in the shopping behavior of shoppers and to customize their shopping experience to drive more sales and thus revenues. Shopper marketing is an approach used by marketers to modify the shopping experience in order to achieve their defined targets. The positioning of shelves and special shopper marketing stands with products, the manner in which products are displayed within a stand, and the visibility of special exposures serve as significant attention grabbers. The conducted research found there to be a statistically significant relationship between the position of shopper marketing stands at the point of sale and the shoppers’ buying behavior. It was established that the position of a stand can slightly or moderately affect the possibility of purchase within a store, while the location can influence the decision-making process behind such a purchase.

The entry zone within a store appears to be the best-performing location of shopper marketing stands as the largest number of shoppers were observed to stop by the stand to observe the products when it was located in the entry zone and most of them also added products from the stand to their shopping carts. The zone along the store and the central zone achieved similar results and both have the potential to catch the attention of a shopper and influence purchase, although this depends on the situation and exposure. However, the zone along the store and the central zone did not achieve a performance level as high as that of the entry zone. The least performing appears to be the cash or check-out zone, where shopper marketing stands grab less attention than in the other observed zones, with a very weak impact on adding to cart. Therefore, the results of the research indicate that customers entering a store with the intention to make a purchase are at their most suggestible at the beginning of their shopping journey within a store. The suggestibility decreases slightly during the shopping process and reaches its lowest level at the end of the shopping journey at the cash or check-out zone.

The implications of the research results may be useful for retailers, who can modify their special exposures and direct them to the beginning of the shopping journey, as well as for manufacturers, who should approach retailers with regard to entry zone exposures of their products. The results also serve to broaden academic knowledge in the discipline of shopper marketing and expand the knowledge base with regard to the topic.

Limitations of the study arise from the different products contained in the same shopper marketing stands in the observed stores. During the research it was not possible to manage the exposure of a same brand and product in each of the stores as exposure is a matter of the store’s monetization policy.

Further research might focus on the relationship and negotiation processes between manufacturer and retailer, given that manufacturers often create demand for shopper marketing activities. In-depth interviews with shelf managers focusing on the shelf management processes, their quality, and quantity could also serve as a valuable topic of further research.
References


