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Sensory Impact on Customer Behaviour

Introduction

The marketing concept holds that the accomplishment of the company's objective is highly related to the knowledge of how to satisfy consumer needs and wants. The company success depends therefore on the extent, to which it is more efficient in the accomplishment of those requirements than the competition. It can be said that in contrast to the product-centred "make and sell" ideology, the marketing concept is focused on the customer and could be defined as "sense and respond" philosophy. The next that appeared during the history goes beyond the needs of the single customer and is focused on the society as general and its long-run welfare. It does not mean that the societal marketing theory resigns from satisfying the short-term desires of the consumers - in contrary, it is trying to complete them thinking already about the future human needs, e.g. related to the environment protection. It seems that all those theories were successful.

During the last years, more and more marketing executives were becoming conscious of the fact that customers, while making their purchase decisions, are influenced by something more than the product or the service itself. The human senses have long been ignored in marketing, despite the awareness of their great significance. Today sensory marketing was distinguished from mass and relationship marketing by having its origin in the five human senses¹. Krishna defines sensory marketing as "marketing that engages the consumers' senses and affects their behaviours"².

According to Lindstrom³, it is the sensory branding that is the future of marketing as it offers the potential to create the most binding form of engagement between brand and consumer seen to date. Following this author, those new brands will possess almost religious identity, expressed in its every message, shape, symbol, ritual, and tradition therefore, through the multisensory experience.

The principal objective of this paper is to analyse the sensory impact on customer behaviours as well as the limitations of its application. The sensory cues that are ana-

¹ B. Hulten, N. Broweus, M. Van Dijk, *Sensory Marketing*, Palgrave Macmillan, London 2009, p. 1, 4-5.

² A. Krishna (ed.), *Sensory Marketing*, Routledge, New York 2010, p. 2

³ M. Lindstrom, *Brand Sense. How to build powerful brands through touch, taste, smell, sight & sound*, Kogan Page Limited, London 2005, p. 153 - 156.

lysed in this paper are sight, sound, scent and touch. Taste is excluded from the further analysis as, according to Kotler, it does not apply directly to the atmosphere.

Sensory impact on behavioural responses and evaluations of consumers

Kotler⁴ defined atmospherics as the “effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability”. Kotler proposed that design of the atmosphere might be especially important in the commercial situations where the product is bought or consumed - therefore it is of a paramount importance for retailers while is less relevant for manufacturers and wholesalers.

Impact of sound

Sound is any disturbance that travels through an elastic medium such as air, ground, or water to be heard by the human ear⁵. The form of sound that can be found most commonly in the service and retailing context is music. It is commonly defined as the art of organized sound, the purpose of which is to elicit an aesthetic response in listeners⁶. It was proved that appropriately structured music acts on the nervous system, activating brain processes with corresponding emotional reactions⁷. Appropriately structured and selected sound stimulus could play a significant role in the success of a business by manipulating music's variables.

Areni and Kim⁸ in their study on shopping compartment in a wine store discovered that classical music produced a higher level of sales than “top-forty” music. Classical music led customers to buy more expensive items. It also provides support for Yalch and Spangenberg's⁹ suggestion that classical music evokes perceptions of higher priced store merchandise, in contrary to “top-forty” that could be paired with more common, less refined environment. Milliman¹⁰ in his study concerning the behaviour of restaurant discovered that slow music led customers to stay longer in the establishment and spend more money on drinks that contributed to 15% higher gross

⁴ Ph. Kotler, *Atmospherics as a marketing tool*, „Journal of Retailing”, 1973, Vol. 49(4), p. 48 - 64.

⁵ *Sound*, The Columbia Encyclopedia, 2008, published: <http://bit.ly/p0Ksg7> [access: 11.08.2012]

⁶ J.J. Kellaris, R.J. Kent, *An exploratory investigation of responses elicited by music varying in tempo, tonality and texture*, „Journal of Consumer Psychology”, 1994, Vol. 2(4), p.381 - 401.

⁷ G.C. Bruner, *Music, mood, and marketing*, „Journal of Marketing” 1990, Vol. 54(4), p. 94 - 103.

⁸ C.S. Areni, D. Kim, *The influence of background music on shopping behavior: Classical versus top-forty music in a wine store*, „Advances in Consumer Research” 1993, Vol. 20, p. 336 - 340.

⁹ R.F. Yalch, E.R. Spangenberg, *Effects of Store Music on Shopping Behavior*, „Journal of Consumer Marketing” 1990, Vol. 7(2), p. 55 - 63.

¹⁰ R.E. Milliman, *The influence of background music on the behavior of restaurant Patrons*, „Journal of Consumer Research” 1986, Vol. 13(2), p. 286 - 289.

margin of the restaurant than in the fast music condition. More recently, the study by Herrington and Capella¹¹ also considered the effects of music on money spent in a supermarket. Although they did not find any significant influence for manipulations of tempo or volume, their analysis revealed a significant effect for musical preference. Similar were results for the time spent in the establishment.

It was proved that music through its various characteristics may have an influence on customers' moods and level of arousal and pleasure. It is capable of affecting their perception of products and services as well as the perceived time passage. It can also contribute to more money and time being spent in the establishment. Therefore, it can be concluded that adequate musical manipulation is important for business and marketing activities.

Impact of smell

The sense of smell has been described by many researchers as one of the "chemical" senses, as it implies the response to the gaseous molecules that, when perceived, are assimilated into the body¹². Smell is considered to be the most closely related to emotional responses of the five senses. Smell is directly related with the feelings of happiness and hunger. Furthermore, scent is the closest sense linked to memory. There is much more evidence that smell is able to affect customers, therefore marketing opportunities related with scent should be carefully examined by retailers.

Many researchers focused their investigations on the effect that olfactory cue may exert on customers and, in consequence, the approach behaviours they were exhibiting. In the study conducted by Spangenberg, Crowley and Henderson¹³, subjects did not remain in the scented store longer than in the unscented environment, however, their perception of the time spent was shorter. Participants expressed as well stronger intentions to visit the store in the future when the scent was present. Similarly to the merchandise evaluations, purchase intentions were varying across conditions for examined products. The intention of purchase for the backpack while no ambient scent was present was only 2.29 (in the 7-point scale) while when the scent was applied, it increased to 2.97. The Haberland's findings¹⁴ confirmed not only the positive effect of scent on approach behaviours but also its impact on the message processing. It was observed that weak arguments (non-persuasive information) can be compensated by the presence of olfactory cue, thus marketers can use fragrances to master a weak

¹¹ J.D. Herrington, L.M. Capella, *The effects of music in service environments: A field study*, „Journal of Services Marketing” 1996, Vol. 10(2), p. 26 - 41.

¹² M. Morrin, S. Ratneshwar, *The impact of ambient scent on evaluation, attention, and memory for familiar and unfamiliar brands*, „Journal of Business Research” 2000, Vol. 49(2), p. 157 - 165.

¹³ E.R. Spangenberg, A.E. Crowley, P.W. Henderson, *Improving the store environment: Do olfactory cues affect evaluations and behaviors?*, „Journal of Marketing” 1996, Vol. 60(2), p. 67 - 80.

¹⁴ F. Haberland, *The Power of Scent: Empirical Field Studies of Olfactory Cues on Purchase Behavior*, published: <http://bit.ly/pgbbtn> [access: 01.08.2012]

argument. Odours can be used to generate more income, comparing scented and un-scented advertisement in the presence of weak argument, the increase of 29% in the purchase intentions was observed. Moreover, odours appear not to hurt consumers' responses. There were no more negative evaluations observed in the scented environment than in the scent absence.

It was proved that odours through their various characteristics are capable of affecting customers' perception of products and services as well as contributing to more money spent and other approach behaviours (e.g. intentions to visit the store). Therefore, it can be concluded that adequate scent manipulation is of the paramount importance for business and marketing activities.

Impact of touch

Touch is the only of the five senses, the sensation of which can be experienced anywhere on the body, contrary to other senses that are primarily located in single areas on the human anatomical map.

Literature confirms that the possibility of the tactile investigation of the object (vs. its lack) contributes to positive consumer responses for any product within the acceptable quality range. Analysing the vast array of studies investigating the topic of how touch influences customer's behaviour, it could be observed that "touch hunger" does not only apply to the social interactions between people, precisely speaking, its lack, but it can also be used to explain customer behaviour in the commercial environment. Peck and Childers¹⁵ discovered that individuals differ in their "need for touch" (NFT), which is "preference and motivation for gleaning information through touch". The authors presented NFT as a mixture of two underlying dimensions: instrumental and auto-telic. Instrumental characteristics could be explained as the belief that only through the tactile inspection we may know if the product is good enough to be bought, therefore it is motivation driven¹⁶. On the other hand, the auto-telic dimension of the NFT expresses the idea of touching the object for fun, arousal, sensory stimulation and enjoyment, therefore is hedonic driven. Peck and Childers¹⁷ discovered that NFT had an influence on the impulse purchasing behaviour, customers' inclination to purchase in the spontaneous and unexplained manner in such a way that individuals with higher NFT results purchased more impulsively than the respondents with low NFT results. When customers of the supermarket were encouraged to touch the products through the presence of the sign telling "feel the freshness", both high and low auto-telic shoppers bought more impulsively than when no sign was displayed.

¹⁵ J. Peck, T.L. Childers, *If I touch it I have to have it: Individual and environmental influences on impulse purchasing*, „Journal of Business Research” 2006, Vol. 59(6), p. 757 -769.

¹⁶ A. Krishna, M. Morrin, *Does touch affect taste? The perceptual transfer of product container haptic cues*, „Journal of Consumer Research” 2008, Vol. 34(6), p. 807 - 818.

¹⁷ J. Peck, T.L. Childers, *If ...*, op. cit., p. 757 -769.

The study conducted by Peck and Childers¹⁸ proved that the accessibility of the tactile investigation of the object may affect customers' confidence about the product evaluation.

The results of the study indicate that managers should allow their consumers to tactually investigate their products. This is expected to increase their evaluations of the merchandise, especially for the high quality objects, as well as increased their confidence about the choice and perceived accuracy of the selection.

Impact of sight

The function of the visual system is to transform light patterns into information, owing to which people are capable of perceiving forms, colours, dimensions, movements and distances between objects. Recent years showed that the way the product looks is not the only factor important for the consumers. There is a wide array of academic studies devoted to the discipline of environmental psychology that is trying to explain how humans feel and behave within certain surroundings.

There are various roles that the product appearance is performing. According to Creusen and Schoormans¹⁹, the way the product looks like first of all serves as the communication of an aesthetic product value. If there are many products with similar properties and price, consumers will choose the one that aesthetically appeal to them most. This aspect of the object was mentioned to be especially important for durable goods that are going to remain in customer's home for many years.

The second most important feature of the product appearance is its symbolic value as the single product can express by brand visual elements. The visual elements represent a range of promises, they are meant to inspire customers and make product identifiable, memorable, and distinct from its competitors. The visual attributes of the product are also expected to give us the information about its ergonomic value - ability of correct performance and expression of its functions.

Although there are many different visual cues that can affect customers' perception of an environment or product. Researchers for many years focused mainly on two aspects: colour and light, under which it is presented. When in 1950s Procter & Gamble introduced on the market the new detergent with three colours of spots: red, blue and yellow, market reports demonstrated that customers perceived the yellow flecks detergent as the one that did not clean clothes enough, the red one as damaging them and the blue as the only one that managed to get the clothes cleaner²⁰. Another study that confirmed that colour has an effect on the attitude towards the product was

¹⁸ Ibid.

¹⁹ M.E.H. Creusen, J.P.L. Schoormans, *The different roles of product appearance in consumer choice*, „Journal of Product Innovation Management” 2005, Vol. 22(1), p. 63 - 81.

²⁰ C. Leichtling, *How color affects marketing*, published: <http://bit.ly/qnFfz> [access: 04.04.2011]

published by Middlestadt²¹. It was shown that participants presented a pen displayed on blue background within blue ambient colour room revealed more positive attitude towards the product than the participants exposed to red condition. The object in blue condition was perceived, among others, as significantly more pleasant, enjoyable, higher in quality, elegant and expensive. All together, it might be concluded that slight differences in how product or establishment is presented, although not being intrinsic for the evaluations, may result in differences in the beliefs about their qualities.

During the study conducted by Shankar *et al.*²², respondents rated brown coloured M&Ms as having more chocolate intensive flavour than the green ones, even though all the bonbons have the same taste. The ratings of the “chocolateyness” were also affected by the ingredients’ information - when product was described as being made from dark rather than milk chocolate, it was perceived as having more intensive taste. The authors suggest that those results are the consequences of the associations that humans make between colours, labels and flavours.

Another important element is light that has a power in stimulating customers’ behaviour and opinions. Apart of this visual function, it was recognized that light might be used to set a mood or impression and, as a consequence, it is an important component of store atmospherics²³.

It was proved that visual characteristics of an establishment and product may have an influence on customers’ behaviour within the retail environment. They are capable of affecting their perception of products and establishment. Therefore, it can be concluded that adequate visual manipulation is important for business and marketing activities.

The regulations of application of solutions proposed by sensory marketing

Following the analysis of the potential impact of senses on the customers’ behaviours, marketers and retailers may consider beneficial for their businesses the application of the sensory marketing to improve their commercial performance. The implementation of the sensory strategy would involve the introduction of musical, olfactory, visual and haptic cues into the brand design and/or the retailing atmosphere. However, from the environmental and social point of view, the existing law regulations ought to be taken into account while implementing such a solution.

²¹ S.E. Middlestadt, *The effect of background and ambient color on product attitudes and beliefs*, „Advances in Consumer Research” 1990, Vol. 17, p. 244-249.

²² M.U. Shankar et al., *The influence of color and label information on flavor perception*, „Chemosensory Perception” 2009, Vol. 2(2), p. 53-58.

²³ T.A. Summers, P.R. Hebert, *Shedding some light on store atmospherics. Influence of illumination on consumer behavior*, „Journal of Business Research” 2001, Vol. 54(2), p. 145-150; D. Ginther, *Lighting: Its effect on people and spaces*, published: <http://bit.ly/olgeMT> [access: 08.08.2012].

The owners of commercial establishments in Poland and in other European Union countries are subjected to various laws and regulations related to the assessment and management of environmental noise like, for example, music played in the commercial establishment (shops, restaurants, etc.). At the first, supreme level, they are subjected to the European Directive 2002/49/EC that emphasizes the urgency for noise monitoring with the purpose of limiting noise pollution and preservation of the quality of life²⁴. The guidelines coming from this directive were implemented into the Polish law through Environment Protection Law. As the consequence of the Environment Protection Law, in 2002, the ordinance of the Minister of Natural Environment on the threshold levels of noise was established presenting permitted values of noise within various areas²⁵.

Managers who would like to spread a pleasant aroma in their commercial establishments should be aware of the consequences that such a decision may have for their customers and employees as well as natural environment. Two categories of air freshening/scenting products are commonly known: continuous action and instant action. Continuous action category is composed on products like scented candles, incense burners, wall plug-ins that aerosolize fragrance, wick and reed diffusers, etc., while instant action devices are aerosol sprays (atomizers). The study published in 2004 by the European Consumers Organization revealed that air fresheners may emit toxic air pollutants. 74 products examined during the study emitted over 350 chemical substances including benzene, formaldehyde, terpenes, styrene, phthalates, and toluene²⁶. The study showed as well that most of the surveyed air freshening products contain substances that may aggravate asthma. Moreover, those products were found to generate volatile organic compounds (VOCs). VOCs are to a large extent responsible for the production of freon, the common air pollutant. Consequently, air freshening/scenting products should be chosen with caution.

Negative environmental effects of visual attributes could be related with the inadequate selection of lighting (e.g. harmful for eyes) and its further inappropriate recycling. In 2002, the European Committee for Standardization established EN 12464-1, norm (in Poland known as PN-EN 12464.1:2004) about the quality aspects of lighting workstations and their direct environment²⁷. Lighting requirements, presented in the norm, were determined to satisfy the three basic human needs: visual comfort, visual performance and safety. European lighting standard values to be applied in commercial settings are presented in Table 1. Not only usage of inappropriate lighting may

²⁴ *Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise*, The European Parliament and the Council of the European Union, published: <http://bit.ly/971rXF> [access: 10.08.2012].

²⁵ *Rozporządzenie Ministra Środowiska z dnia 9 stycznia 2002 r. w sprawie wartości progowych poziomów hałasu*, Dziennik Ustaw nr 8, published: <http://bit.ly/pudYfZ> [access: 10.08.2012].

²⁶ *Emission of chemicals by air fresheners. Tests on 74 consumer products sold in Europe*, BEUC Report, January 2005 published: <http://www.beuc.org> [access: 13.08.2012].

²⁷ *EN 12464-1*, published: www.ciop.pl [access: 13.08.2012].

harm the final users, also incorrect recycling may bring negative consequences to the natural environment and human beings' health.

Table 1

Standard values for lighting according to European Norm EN 12464-1

Type of interior, task or activity	Em (lux)*	UGRL	Ra
Sales area	300	22	80
Till area	500	19	80
Wrapper table	500	19	80

* Em (lux) - maintained luminance - the minimum value to which the luminance (light incident on a surface) is allowed to fall; UGRL - Unified Glare Rating limit – upper limit for direct glare; Ra - is the lower limit for the colour rendition index.

Source: Own elaboration on basis of EN 12464-1, published: www.ciop.pl [access: 13.08.2012].

The fact of enabling consumers to touch the product or enhance shop employees to briefly touch customers does not have negative effects on the natural environment. No law documents regulating this kind of customer - retailer relations were found to be in force in the European Union or Poland.

The application of sensory cues in the marketing activities may have an influence on the natural environment only when products that do not obey international security norms are utilized and when they are not recycled properly. If the quality standards of products (air fresheners, lighting) are followed and used objects are collected in special containers, the environmental impact of the sensory marketing solutions will be minimal.

Conclusions

The competitive environment and growing expectations of customers force the companies to search the new methods and tools of customers' value creation. The principles and models of the traditional marketing became insufficient and they should be completed by new solutions. To attract customers and affect their behaviours, companies can use some experimental solutions proposed by the sensory marketing.

The analysis of the results of chosen international studies showed that the sensory cues may positively impact the consumer's behaviour, but all the managerial decisions about applying senses to the retail establishment ought to be made with caution. It should always be remembered that some combinations of cues might damage the evaluations of the products or the environment (e.g. when their arousal properties do not match), or even influence the purchase decision. Therefore, before applying the sensory marketing, the pretest should always be conducted.

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Summary

The principal objective of this paper is to analyse the sensory impact on customer's behaviours as well as the limitations of its application. The analysis is based on the results of various international studies. It was proved that music and odours through their various characteristics may affect customers' perception of products and services as well as the perceived time passage and contribute to more money and time being spent in the establishment. The results of the study indicate that managers should allow their customers to tactually investigate their products. It was proved also that visual characteristics of an establishment and product may have an influence on customers' behaviour within the retail environment. The implementation of the sensory strategy would involve the introduction of musical, olfactory, visual and haptic cues into the brand design and/or the retailing atmosphere. However, from the environmental and social point of view, the existing law regulations ought to be taken into account while implementing such a solution.

Key words: sense, customer's behaviour, sensory marketing.

JEL codes: D19, M31

Wpływ zmysłów na zachowania konsumentów

Streszczenie

Zasadniczym celem artykułu jest analiza oddziaływania zmysłów na zachowania klientów, jak również ograniczenia jego stosowania. Analiza opiera się na wynikach

różnych badań międzynarodowych. Wykazano, że muzyka i zapachy poprzez swe różne cechy mogą wpływać na percepcję przez klientów produktów i usług, jak również postrzeganego upływu czasu i przyczyniać się do tego, że w placówce wydaje się więcej pieniędzy i spędza więcej czasu. Wyniki badania wskazują, że menedżerowie powinni pozwalać swym klientom na dotykowe badanie swych produktów. Wykazano również, że wizualne cechy placówki i produktu mogą mieć wpływ na zachowanie klientów w środowisku placówek detalicznych. Wdrożenie strategii sensorycznej wiązałoby się z wprowadzeniem bodźców muzycznych, węchowych, wzrokowych i dotykowych do projektu marki i/lub klimatu w handlu detalicznym. Z drugiej strony, ze środowiskowego i społecznego punktu widzenia należałoby brać pod uwagę istniejące przepisy prawne w trakcie wdrażania takiego rozwiązania.

Słowa kluczowe: zmysł, zachowanie klientów, marketing sensoryczny.

Kody JEL: D19, M31