

The application of neuromarketing in retailing and visual merchandising



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Abstract

The impact of brands, products, advertisements and merchandising tools used as a part of in-store communication act together at the point of sale during shopping. The subject of marketers' and researchers' interest is the measurement of the final purchasing interest and observation of consumer behaviour at the point of sale – what, where, when, why and for how much are consumers buying. However, there are a high number of measurable variables, such as perceived simplicity of finding out the products, overall impression of the shop and likelihood of return, consumer behaviour is the final subject of interest. This simple fact widely influences the possibilities of the most effective application of neuromarketing methods used for the measurement of shopping experiences.

Keywords: neuroscience, retail, merchandising, communication, behavioural studies, purchasing environment, interactive virtual reality, neuromarketing

JEL Classification: L81, L86, M31, Q55

Predicting consumer behaviour has always been a major interest of marketing experts. Traditional marketing researches are still effective and shall be used in marketing. However, there are situations when it is necessary to complement conventional methods by modern ones. Marketing experts say that marketers shall no longer be guided by what the respondents declare about themselves in surveys, because their brain – the part that does not pretend anything – often contradicts it. Neuromarketing basically refers to **the measurement of physiological and neural signals to gain insight into customers' motivations, preferences, and decisions**, which can help inform creative advertising, product development, pricing, and other marketing areas.

Visual merchandising is nowadays used and applied everywhere, from stores, public institutions, whole HORECA segment as well as in events. In retail and business services, the contact between provider and customer directly at the point of sale presents the most direct process of marketing, and time and money spending depend on atmosphere which is around the customer and influence his/her senses. The aim of visual merchandising is to capture consumer's attention. That means everything that customer can see, smell, touch, hear, exterior or interior, creates a positive or negative impact on a guest. Retailers or service providers are gradually realizing that only selling the product or services matters, but customers' satisfaction and convenience is too important for shopping. Visual merchandising is therefore concerned with both, how the product or service and their brands are visually communicated to the customer and whether this message is aptly decoded. The consumer perception is based on visual contact too; one picture can replace thousand words. Visual food merchandising is one of the hottest trends in the restaurant, foodservice and hospitality industry today, it is the modern art of presenting products in a way, that gets the guests to buy as well as bringing services to life with eye-catching displays of freshness, colour, quality, design, first impression or abundance.

Consumer psychology and neuroscience provide more detailed research on consumer behaviour and decision-making process at the point of sale. Modern neurosciences brought the tools providing an insight into human brains and thus opening a way to psychological process of decision-making – to the black box of brain. Recently, there is a strong interest in the concept of application of the neuroscience methods used for the research of consumer emotions and cognitive reactions. In fact, the use of psycho- physiological techniques in consumer research is nothing new.

It is necessary to pay attention to human behaviour while implementing the marketing, because shopping represents a comprehensive experience for human mind. New revolutionary techniques provide unimaginable potential for performance of marketing and neuromarketing techniques. Retail marketing is changing very quickly and many retailers are trying to use innovative ideas to help them to be different from their competitors. Using sophisticated neuro-research, companies can uncover what influences their customers and what processes precede consumer's decision. Based on its results, companies choose an optimal marketing strategy directly at the point of sale. In this context, retailers can use merchandising and communication tools to attract customers' attention – POP and POS materials. Providing comprehensive enjoyment from shopping that includes finding, choice and payment can only be done if it is in line with conscious and subconscious goals of the consumer.

Neuroscience research provides relevant answers to the questions in the field of visual merchandising and communication at the point of sale:

- ▶ attractiveness of the shop's exterior (storefronts, entries, banners);
- ▶ attractiveness of the shop's interior (design, atmosphere, illumination);
- ▶ attractiveness of merchandising and its tools (displaying, organization of goods, POP and POS materials);
- ▶ consumer behaviour and decision-making process at the point of sale (immediate vs planned purchases).

Neuromarketing research in the field of visual merchandising can be carried out in simulated or real purchasing conditions. This is related to the frequent use of mobile research technologies. Brain activity is mostly displayed by EEG, which is usually supplemented with biometric measurements such as EOG (measure with eye camera – eye tracker) and measurement of cardiac and respiratory activity. Under the application of neuro-displaying and biometric methods into practical research activities is understood their use in the research of selected situations in consumer behaviour. They provide information to be used for deeper understanding of consumer behaviour and decision-making. Nowadays, behavioural studies can be searched either in natural purchasing environment or simulated one.

Behavioural studies in natural purchasing environment

Observation of the mental state of buyers in natural environment falls into a range of challenges that are growing in proportion with more and more sophisticated and sensitive technologies for data collection. Following techniques are applied for carrying out the consumer neuro-tests in real purchasing environment:

Eye tracker: is a helpful method for analysis of consumer behaviour, POP and POS design and merchandising at the point of sale. In this case it is necessary to use the mobile version of the device to ensure authenticity of the study.

Electroencephalography (EEG): provides very sensitive measurement of electric activity in brain but it is also very sensitive to muscle movements such as turning head, eye movements and other muscle activities. These signals endanger the EEG measurement of the person naturally moving in the shop. Same problem with disturbing elements can be found in biometric measurements of emotions based on the technologies using sensors applied on moving body.

Behavioural studies in simulated purchasing environment

It was found that consumer behaviour in real conditions can be transformed into laboratory conditions because deep subconscious processes and prejudices are activated in both cases. Eye tracker applied while testing the static pictures of planograms provides helpful knowledge on how the consumers visually browse the products displayed in shelves. If combined with other biometric and neurometric measurements and clear role of the selection, these studies can provide much practical information on the influence of various configurations of shelves when searching and choosing the products.

Compromise between reality and monitoring carried out within the testing of consumer behaviour can be achieved if customers are watching the video from purchasing environment directly in the laboratory. All

participants of the test sample are watching the same video. This improves the control of testing and ability to stay in one position and disturbing elements become partly eliminated.

Imaginary walk in video recorded in shop aisles is another possibility for observation of the passive purchasing behaviour. Interactive virtual reality (VR) is used in order to create a shopping experience. Virtual purchasing environment brings significant savings in comparison to designing and preparation of tests in shop. In addition, it provides better balance between naturalness and control than can be achieved by watching conventional videos in laboratory.

Some neuromarketing agencies began to provide very detailed and interactive VRs including ideal 3D environment. In coming years, it is expected that this approach will be further developed as modern neuromarketing research tool.

Application of neuromarketing in visual merchandising in the retail can contribute to uncovering and understanding of real consumer preferences in grocery stores and significantly increase their competitiveness.

Effectiveness and energy demand relates to the issue of effective presentation of products in retail stores. Especially, while using such important marketing tool as lighting, it is necessary to take into account energy consumption, because lighting is one of the main cost items of the retail store. The retailer should focus not only at the elegant presentation of displayed goods, but it is also needed to look for a compromise between energy consumption of lights and their influence on consumer perception at food market.

Energy consumption in individual retail stores may vary depending on format and segment. By far the largest energy consumption is in food stores to keep the food products in cold and also for presentation of the fresh products. For this reason, neuromarketing can contribute with important information while choosing the material technical base. That creates a sufficient platform for combination of effective and efficient equipment of the retail store.

Conclusions

Nowadays marketers and companies can choose the method of obtaining information about target markets. They can choose traditional, neuromarketing or combined form of market research. The combination of traditional and neuromarketing research represents the best form of current market research, and therefore it is expected that neuromarketing research methods could become a common part of traditional researches in the future.

Neuromarketing is a hype, yet it is faced with a number of teething problems, including the costliness and complexity of its state-of-the-art techniques like electroencephalogram and functional magnetic resonance imaging. Such techniques require laboratory set-ups and so do not lend themselves to day-to-day market research processes. And neuromarketing still faces a number of other barriers. It still lacks supporting scientific proofs and it faces credibility issues as some early neuromarketing enterprises have made exaggerated, unverified and scientifically irresponsible claims.

Additionally, most studies still rely on laboratory set-ups and expensive technologies which do not allow the necessary scalability for the techniques to be applied more widely. In order to overcome these obstacles, policy makers could make strategic initiatives and introduce ethical codes. Yet as too many providers entered the neuromarketing field in its early days and failed to apply sound and robust scientific methods, a lot of credibility was lost. Although the methods applied nowadays have a more profound scientific basis, neuromarketing approaches still lack the scientific proofs that would support their case as meaningful methods

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