

Improving the Activities of Retail Enterprises Based on Neuromarketing

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Abstract: Retail enterprises operate in environments where competitors can copy prices, promotions, and even assortments faster than ever. What remains harder to copy is a retailer's ability to design customer experiences that reliably convert attention into purchase, purchase into satisfaction, and satisfaction into repeat behavior. Neuromarketing, situated within consumer neuroscience, offers retail managers an additional evidence layer about how shoppers actually perceive, process, and emotionally respond to products, shelves, services, and store atmospherics in real time. Rather than replacing traditional research, neuromarketing complements surveys and interviews by capturing rapid and partly nonconscious mechanisms such as visual attention, cognitive effort, arousal, and memory formation.

Key words: neuromarketing, consumer neuroscience, retail management, shopper behavior, eye tracking, store atmospherics.



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INTRODUCTION

Retail enterprises do not lose the competitive race because they lack ideas; they lose because they execute the wrong ideas confidently and repeatedly. Many retail decisions are still made through a mixture of experience, intuition, and occasional customer surveys. Experience matters, but retail reality has changed: customers compare instantly, attention is fragmented, and decision time is compressed. In a supermarket aisle, a pharmacy shelf, a fashion rack, or a mobile shopping app, the customer does not "evaluate" like a committee; the customer scans, feels, recognizes, doubts, and decides. This is why improvements in retail activities increasingly depend on understanding how shoppers actually process information in the moment, not only how they explain their decisions afterward.

MATERIALS AND METHODS

Neuromarketing approaches emerged precisely to address this gap. Within the broader field of consumer neuroscience, neuromarketing uses tools such as eye tracking, electroencephalography, and psychophysiological measures to study attention, engagement, cognitive load, and affective response to marketing stimuli. The strongest academic work repeatedly stresses two principles. First, these methods are not mind-reading and should not be used for exaggerated claims; they are measurements that require careful interpretation. Second, neuromarketing becomes valuable when it complements conventional methods and produces testable, outcome-linked recommendations for improving marketing and operational decisions. If retail competitiveness is the ability to win more customers more profitably and more consistently than rivals, then neuromarketing can be understood as a way to reduce uncertainty in the highest-impact moments of the customer journey.

RESULTS AND DISCUSSION

Retail activities can be improved through neuromarketing by focusing on the mechanisms that determine choice in real settings: attention allocation, processing fluency, emotional comfort, and memory formation. Traditional methods often capture what customers can articulate, but many retail outcomes depend on what customers do automatically. People often cannot accurately report why they did not notice a sign, why a package felt “cheap,” why a promotion felt confusing, or why a store felt exhausting. This is not because customers are dishonest; it is because much of the decision process is rapid and partly nonverbal. Consumer neuroscience research argues that neuroscientific and physiological measures can complement marketing theory and research practice, especially when aligned with clearly defined managerial questions and behavioral validation. For retail enterprises, the practical message is simple: improve what shoppers actually see, understand, and feel, not what management hopes shoppers see, understand, and feel.

One of the most direct applications is merchandising and shelf execution, because the shelf is where choice becomes physical. A retailer may negotiate better terms, develop strong private labels, or run attractive discounts, yet still underperform if products are not found quickly or if decisive information is missed. Eye tracking is particularly valuable here because it reveals real gaze paths and dwell time rather than assumed attention. Evidence from point-of-sale eye-tracking research shows that attention is fragmented and that results can differ between desktop or lab contexts and real shelves, which is precisely why field-oriented testing matters for retail decision-making. When retailers use eye tracking to improve planograms, they often discover that important messages sit outside natural gaze routes, that too many competing stimuli dilute attention, and that “promotional loudness” can paradoxically reduce clarity. Shelf improvement based on neuromarketing is therefore not decoration; it is decision engineering. The goal is to reduce search cost and cognitive load: simplify category navigation, make alternatives easy to compare, and ensure that high-margin or strategic items are visible in early attention zones. When shoppers find what they want faster and feel confident about the choice, conversion improves, basket composition shifts toward profitable items, and the enterprise gains a competitive advantage that is harder to copy than a one-week discount [1].

Pricing and promotional communication is the second major activity where neuromarketing can produce measurable improvements. Retailers frequently treat promotions as an arithmetic problem, but customers often experience promotions as a comprehension problem. If a customer cannot immediately understand the offer, the offer fails, even if it is objectively good. In neuromarketing terms, confusing promotions increase cognitive effort and reduce processing fluency. A retailer that uses neuromarketing tools to test price tags, discount formats, and promotional signage can identify where the customer hesitates, what they read, what they ignore, and whether the information hierarchy supports quick understanding. The managerial payoff is not simply “higher response to promotions” but smarter promotion design: fewer offers that require heavy explanation, cleaner communication of value, and a better balance between promotional

intensity and trust. Demystification work in neuromarketing emphasizes that methods must be matched to the decision problem and interpreted cautiously, which in retail translates into an operational rule: use attention and response measures to improve clarity, then validate with sales, margin, and repeat behavior rather than assuming that a physiological signal automatically equals profit [2].

Packaging and private-label development represent a third high-impact area, especially for retailers seeking to strengthen differentiation and margin. Private labels are not only products; they are trust propositions. Shoppers evaluate quality and risk quickly, often through design cues, perceived consistency, and the ease of understanding benefits. Eye tracking helps retailers see whether shoppers notice key claims, whether they understand category fit, and whether design elements guide attention toward the intended message. Where neuromarketing adds value is in detecting “silent failure”: packaging that looks appealing to managers but does not communicate quickly to shoppers in a crowded shelf environment. A competitive retailer treats packaging as a functional interface, not as a canvas for creativity alone. The task is to compress meaning: what is it, who is it for, why is it better or worth it, and can I trust it. When private labels communicate value with clarity and confidence, retailers can reduce dependence on manufacturer promotions, strengthen loyalty, and increase profitability. Consumer neuroscience research highlights that neuromarketing is most useful when integrated with marketing practice and theory and when it addresses real managerial decisions rather than producing isolated neural narratives. That integration is especially important in private-label strategy because the end goal is not a pleasing package but a scalable identity system across categories, supported by consistent customer experience [3].

Store atmospherics and experience design form the fourth strategic dimension. Competitiveness in retail is not only about what is sold but about how it feels to buy it. Atmospherics influence time spent in store, perceived quality, mood, and even willingness to explore. The retail environment includes lighting, spatial layout, music, scent, tactile cues, and crowding. A well-cited review of atmospheric effects documents that environmental stimuli can influence shopping behavior across multiple outcomes, reinforcing that store design is not background; it is a behavioral driver. A multisensory perspective further explains that shoppers respond to combinations of sensory cues, and the key managerial question is how to design these cues to create a worthwhile return on investment rather than sensory overload. Neuromarketing can contribute by measuring arousal and stress patterns, identifying where the environment supports approach behavior or triggers avoidance, and testing whether sensory congruence strengthens the retailer’s intended positioning. For example, a premium retailer benefits when lighting increases perceived product quality and when soundscapes support calm exploration, while a convenience format benefits when layouts reduce friction and accelerate navigation. Neuromarketing-driven atmospherics improvement is therefore about building consistent emotional comfort and brand memory, not about theatrical stimulation. In competitive terms, a retailer that systematically manages atmospherics can defend against price wars because customers return not only for deals but for a reliable experience that feels easy and trustworthy [4].

Customer journey management and service design represent the fifth activity area where neuromarketing can upgrade performance. Many retail losses happen not at the shelf but between touchpoints: entrance confusion, poor wayfinding, inconsistent staff interaction, checkout stress, and returns friction. Traditional operational analytics can measure queue time or abandonment, but they do not always reveal the felt experience that creates dissatisfaction. Neuromarketing and psychophysiological measures can help identify peaks of stress and uncertainty, and eye tracking can reveal whether navigation cues are actually seen. These insights matter because customer satisfaction is shaped disproportionately by moments of friction and relief. If a retailer removes the most frustrating points in the journey, the effect is often nonlinear: small improvements can

produce meaningful gains in conversion, repeat visits, and word-of-mouth. The realistic discipline here is to treat neuromarketing data as a diagnostic to prioritize improvements, then verify outcomes through experiments and KPI tracking. The strongest neuromarketing literature warns against overclaiming and encourages careful application and validation, which aligns perfectly with retail management's need for measurable results [5].

CONCLUSION

Improving the activities of retail enterprises based on neuromarketing is best understood as improving the quality of retail decisions in the moments that matter most: what shoppers notice, how easily they understand value, how comfortable they feel, and what they remember. Neuromarketing contributes by revealing attention patterns at shelves and screens, identifying comprehension breakdowns in pricing and promotions, strengthening packaging and private-label trust cues, optimizing store atmospherics as a multisensory competitive advantage, and diagnosing friction points in the customer journey. The most credible academic and professional sources emphasize that neuromarketing is not mind-reading and must be used with methodological rigor, triangulation, and honest interpretation.

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