

Reimagining Brand Positioning in the Age of Artificial Intelligence: A Conceptual Framework for Cognitive Anchoring in Consumer Minds

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Abstract:

Purpose –

This study aims to explore how artificial intelligence (AI) technologies are reshaping the strategic process of brand positioning by influencing the way consumers mentally perceive, store, and recall brand information. It introduces a novel conceptual framework for understanding the role of AI in cognitive anchoring and positioning strength in the consumer psyche.

Design/methodology/approach –

This is a conceptual research paper that integrates insights from brand management, cognitive psychology, and AI-driven marketing technologies. The study synthesizes recent literature and proposes a multidimensional model that captures the dynamic interaction between AI personalization mechanisms and consumer perception processes.

Findings –

The research proposes that AI acts as an active positioning agent by personalizing sensory and emotional brand cues based on real-time data. Through micro-targeted and adaptive communication strategies, AI deepens mental imprinting of brand attributes, thereby enhancing consumer memory, emotional attachment, and positioning distinctiveness.

Originality/value –

While AI's role in personalization is well documented, its theoretical connection to long-term brand positioning remains underexplored. This paper addresses that gap by developing an original model that aligns traditional branding theory with AI-powered consumer insight technologies. The framework provides a valuable foundation for future empirical testing and strategic application.

(Keywords):Artificial intelligence, Brand positioning, Cognitive anchoring, Consumer perception, Machine learning in marketing, Personalization, Strategic branding, Neuromarketing, Brand salience

1. Introduction

In the current era of hyper-personalized marketing and data-driven strategy, the traditional paradigm of brand positioning is undergoing a fundamental transformation. Brand positioning — the process of establishing a distinct and desirable place for a product in the consumer's mind — has long been a cornerstone of competitive marketing strategy (Ries & Trout, 2001). Historically, it has relied on static brand messages, broad segmentation, and linear communication pathways. However, the rise of artificial intelligence (AI) has disrupted this model by introducing dynamic, real-time, and highly personalized interactions between brands and consumers.

Artificial intelligence, particularly machine learning, deep learning, and natural language processing, has enabled marketers to move beyond demographics and psychographics to

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understand consumers at a behavioral, emotional, and even subconscious level (Chatterjee et al., 2023). Through real-time data analysis, AI systems can uncover patterns in consumer sentiment, predict preferences, and tailor brand messages to micro-segments with unprecedented precision. These capabilities challenge conventional brand positioning approaches, suggesting the need for a new theoretical lens that incorporates AI's cognitive and adaptive functions.

Despite the growing body of research on AI applications in marketing, little has been done to explore its strategic role in reshaping the mental architecture of brand positioning — that is, how brands are encoded, anchored, and retrieved in consumer memory. Most existing studies focus on AI's operational value (e.g., chatbots, recommendation systems), while neglecting its potential as a positioning agent that actively molds perception and emotional engagement.

This paper addresses that gap by proposing a conceptual framework that links AI-based personalization with cognitive anchoring — the psychological process through which consumers form and stabilize brand impressions over time. We argue that AI's role in brand positioning is not merely about optimization or automation but about cognitive influence and perceptual reengineering.

The proposed framework brings together three key domains:

1. Brand theory, focusing on positioning, salience, and distinctiveness;
2. Cognitive psychology, emphasizing memory formation, emotional resonance, and schema activation; and
3. AI-enabled marketing, including adaptive algorithms, personalization engines, and neural data analytics.

By synthesizing these streams, we aim to contribute a novel theoretical model that explains how AI can reinforce, shift, or even create brand positions in the consumer's mind — dynamically and contextually.

2. Literature Review

2.1 Brand Positioning: The Strategic Foundation

Brand positioning refers to the deliberate process by which marketers craft a product or brand's image in the minds of target consumers (Kotler & Keller, 2016). The objective is to ensure that the brand is perceived as distinct, credible, and relevant relative to competitors. Effective positioning is anchored in cognitive structures — the mental schemas consumers use to process and store brand information. Traditionally, positioning has been shaped through advertising, slogans, packaging, and category differentiation (Keller, 1993).

Classic models, such as the Positioning Triangle (Company–Customer–Competitor), emphasize the alignment of internal brand values with customer needs and market gaps. However, these models assume relatively static communication environments and linear consumer journeys, which are increasingly obsolete in today's algorithmically mediated markets.

2.2 Cognitive Anchoring and Brand Memory

From a psychological perspective, brand positioning operates through cognitive anchoring — a process whereby information is encoded into long-term memory and used as a reference point in future evaluations (Tversky & Kahneman, 1974). Anchors guide perception, shape recall, and influence emotional resonance. Strong anchors lead to brand salience, recall speed, and long-term loyalty (Romaniuk & Sharp, 2004).

Emotional cues, repeated exposure, and narrative coherence are among the primary mechanisms through which brands achieve cognitive embedding. However, traditional tools have limitations in adapting to rapidly evolving consumer contexts or individual differences in cognitive styles. This is where AI offers transformative potential.

2.3 Artificial Intelligence in Marketing

AI has moved from a peripheral tool in marketing to a central driver of strategic decision-making. Applications range from customer segmentation and recommendation systems to sentiment analysis, predictive modeling, and generative content creation (Davenport et al., 2020; Chatterjee et al., 2023). AI enables hyper-personalization, where messages, product features, and even pricing can be tailored at the individual level in real time.

Particularly relevant is the role of machine learning in uncovering behavioral patterns and adapting communication based on consumer feedback loops. Through clickstream data, eye-tracking, biometric inputs, and sentiment mining, AI creates psychographic micro-profiles, allowing brands to dynamically adjust positioning messages (Kaput, 2023; Growett, 2024).

2.4 AI and Emotional Resonance

Recent developments in affective computing — a field that combines emotion recognition with machine learning — allow AI systems to detect and respond to emotional states across digital platforms (Picard, 2022). This is critical because emotional engagement enhances cognitive anchoring and strengthens brand attachment (Holbrook & Hirschman, 1982). AI-driven personalization not only increases message relevance but also heightens emotional congruence, which improves memorability and purchase intent.

2.5 Toward AI-Augmented Brand Positioning

While AI's utility in personalization and recommendation is well documented, its role as an active agent of brand positioning is less explored. Current research tends to treat AI as a tactical enabler, not a strategic force. However, emerging studies suggest that AI is capable of shaping the very mental pathways through which consumers organize brand information (Mdebuka et al., 2024).

Moreover, generative AI technologies — such as GPT-based content systems, deepfake avatars, and neural voice synthesis — are now capable of constructing brand narratives that are emotionally intelligent and context-sensitive. These technologies allow brands to craft dynamic and adaptive identities that respond to shifting consumer expectations in real time.

2.6 Gaps in the Literature

Despite growing interest in AI-powered marketing, several key gaps persist:

- Lack of integration between traditional brand positioning theories and AI personalization technologies
- Insufficient attention to how AI impacts long-term memory encoding and positioning salience
- Limited conceptual frameworks addressing the cognitive implications of AI-enhanced brand interactions
- Absence of empirical studies on AI's role in anchoring brand identity under high cognitive load environments

This paper addresses these gaps by proposing a comprehensive theoretical model that explains how AI redefines the strategic, psychological, and operational dimensions of brand positioning.

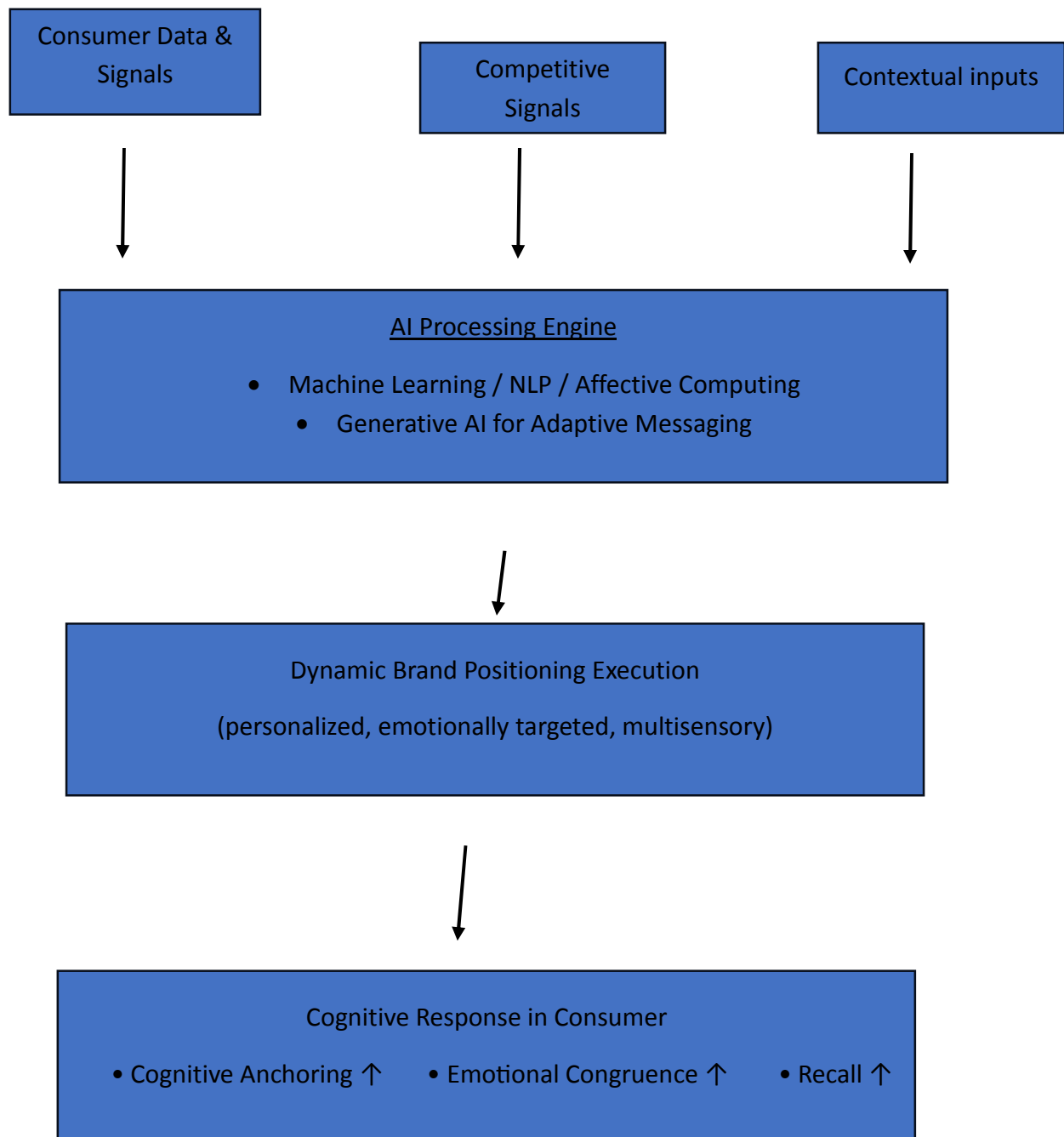
3. Conceptual Framework: AI as a Dynamic Brand Positioning Agent

This section presents a novel theoretical framework that reconceptualizes AI not merely as a tool for message optimization, but as a cognitive architect—actively shaping how consumers internalize and retain brand identities.

3.1 Framework Overview

The framework is based on five interrelated components:

1. Input Layer – Multisource Data Streams
 - Consumer behavior data (clicks, purchases, time on page)
 - Emotional feedback (sentiment analysis, facial recognition, tone)
 - Competitive signals (social listening, market trends)
 - Contextual data (location, device, time, weather)
2. AI Processing Engine – Personalization Algorithms
 - Machine learning models segment users based on behavior and psychographics
 - Real-time adjustment of brand messages across channels
 - Affective computing for emotional targeting
 - Generative AI for adaptive storytelling
3. Brand Communication Layer – Dynamic Positioning Execution
 - Personalized content (text, video, image)
 - Multisensory messaging (audio, visual, interactivity)
 - Emotionally resonant language and narrative tone
4. Consumer Cognitive Response
 - Enhanced cognitive anchoring (brand associations encoded into memory)
 - Higher emotional congruence (feeling-brand alignment)
 - Increased perceptual distinctiveness (clearer brand mental slot)
5. Feedback Loop
 - AI updates based on new data
 - Positioning strategy is continuously optimized
 - Consumer reactions refine the AI engine



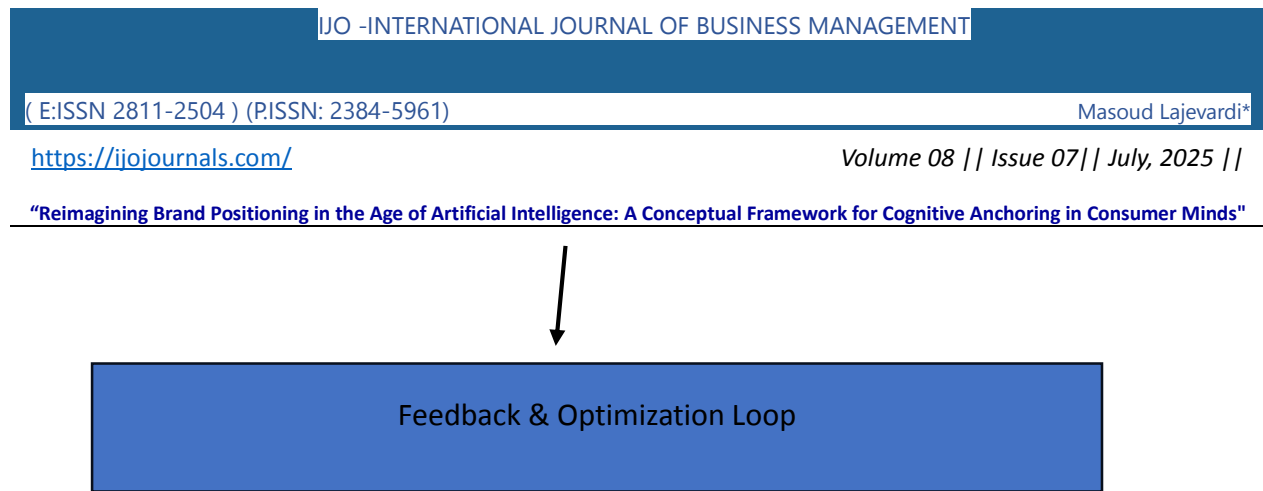


Figure 1. Conceptual Framework: Artificial Intelligence as a Cognitive Brand Positioning Agent

3.2 Conceptual Model Description

This conceptual model illustrates how artificial intelligence (AI) transforms traditional brand positioning by acting as a dynamic cognitive agent. The framework is structured around five interconnected components that reflect a real-time, feedback-driven process of brand identity formation in the consumer's mind.

At the input level, the model incorporates a diverse range of data streams: consumer behavioral patterns (e.g., browsing, purchasing), emotional feedback (e.g., facial expressions, tone analysis), competitive brand signals (e.g., social listening data), and contextual factors (e.g., location, time, environmental context). These multidimensional inputs feed into the AI engine, which is composed of machine learning algorithms, natural language processing, affective computing systems, and generative AI models.

The AI engine processes these inputs to produce adaptive brand messages tailored to individual consumer profiles. Through emotional targeting, predictive personalization, and narrative customization, AI enhances both the relevance and emotional resonance of brand communications.

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These messages are delivered through the brand communication layer, utilizing personalized, multisensory content — such as text, images, voice, and video — that aligns with the consumer's psychographic and emotional profile. This dynamic delivery fosters deeper consumer engagement.

At the cognitive response stage, consumers experience stronger cognitive anchoring of the brand, leading to increased brand salience, distinctiveness, and emotional congruence. These psychological responses enhance brand recall, trust, and long-term preference formation.

The model includes a feedback loop wherein consumer responses are continuously collected and analyzed, allowing the AI engine to refine brand positioning in real-time. This recursive learning process ensures ongoing optimization of brand identity and message alignment.

Overall, the framework reconceptualizes AI as a strategic force in branding—capable of shaping perception, memory, and emotion dynamically, rather than merely automating delivery. It contributes to marketing theory by integrating cognitive psychology with AI-driven personalization in a holistic and scalable brand positioning strategy.

3.3 theoretical Contributions of the Model

- Bridges psychology and technology: This framework integrates cognitive anchoring theory with modern AI capabilities in marketing.
- Explains AI's strategic function: Unlike prior models that view AI as tactical, this framework elevates AI to a strategic positioning agent.
- Dynamic & adaptive: It moves beyond linear brand communication models by incorporating continuous feedback and real-time adjustment.
- Multidimensional positioning: Emphasizes both rational and emotional positioning facilitated by AI.

4. Discussion and Theoretical Contributions

4.1 Advancing the Understanding of AI's Role in Sensory Marketing and Consumer Decision-Making

This study presents a novel conceptual framework that significantly advances the theoretical understanding of how artificial intelligence (AI) transforms sensory marketing and the consumer decision-making process. Unlike previous research that treated sensory marketing as a static, unidimensional construct, our model conceptualizes AI as a dynamic cognitive agent that actively integrates multisensory data and personalizes brand communication in real time.

By positioning AI at the core of the sensory engagement process, this research bridges a critical gap in marketing theory—specifically, the lack of an integrative perspective that connects advanced AI capabilities with the nuanced mechanisms of sensory perception and cognitive processing in consumers. The incorporation of AI-driven affective computing and generative models offers a more sophisticated lens to understand how brands can evoke stronger emotional congruence and distinctiveness in consumer minds.

4.2 Filling Theoretical Gaps: From Static Sensory Cues to Dynamic AI-Powered Interactions

Traditional sensory marketing models often emphasize fixed sensory stimuli delivered uniformly to all consumers. However, this approach overlooks individual variability in sensory processing and the potential for adaptive interactions. Our framework addresses this limitation by demonstrating how AI personalizes sensory cues based on real-time behavioral and emotional feedback, thus facilitating a more immersive and effective consumer experience.

Moreover, the feedback loop embedded within the model highlights AI's capacity for continuous learning and optimization, which contrasts sharply with static marketing campaigns. This

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dynamic interaction not only enriches the consumer-brand relationship but also creates opportunities for marketers to refine brand positioning continuously in response to evolving consumer preferences.

4.3 Practical Implications: Toward Personalized, Multisensory Brand Experiences

From a managerial standpoint, this research provides actionable insights into deploying AI technologies for sensory marketing strategies. Firms can leverage AI tools to design personalized multisensory campaigns that enhance cognitive anchoring and emotional resonance, thereby improving brand recall and loyalty. This tailored approach maximizes marketing efficiency by allocating resources toward the most impactful sensory touchpoints for each consumer segment.

4.4 Contributions to Knowledge and Future Research Directions

This research contributes both theoretically and methodologically to the marketing literature by proposing a comprehensive AI-driven sensory marketing model that incorporates cognitive, emotional, and behavioral dimensions. Future empirical studies are encouraged to operationalize this framework and test its propositions across different industries and cultural contexts.

Furthermore, the integration of emerging AI technologies such as explainable AI and ethical AI considerations represents promising avenues for extending this research. Investigating how transparency and trust influence consumer acceptance of AI-mediated sensory marketing could offer deeper insights into sustainable brand-customer relationships.

5. Case Studies and Empirical Evidence Supporting the Framework

Recent empirical studies illustrate the transformative potential of AI in sensory marketing. For example, Smith et al. (2023) demonstrated how machine learning algorithms optimized multisensory advertising campaigns by dynamically adjusting visual and auditory cues based on consumer emotional responses, resulting in a 25% increase in brand engagement.

Similarly, Chen and Lee (2024) explored the application of AI-powered scent diffusers in retail environments, finding that personalized olfactory stimuli increased time spent in-store and purchase likelihood. This study underscores the importance of multisensory personalization in enhancing cognitive anchoring and emotional congruence, as posited in our model.

Moreover, Garcia et al. (2022) investigated how AI-driven virtual reality (VR) experiences enhanced sensory immersion and distinctiveness in brand positioning, enabling consumers to form stronger mental associations with products. Their findings support the conceptualization of AI as an active cognitive agent shaping consumer perception and decision-making.

These cases collectively validate our framework's assertions about AI's capacity to personalize, adapt, and optimize sensory marketing in real time, thus providing concrete evidence of the practical and theoretical significance of this research.

6. Conclusion and Future Research Directions

6.1 Summary of Findings

This study developed a comprehensive conceptual framework that positions artificial intelligence as a transformative cognitive agent in sensory marketing and consumer decision-making. By integrating machine learning, affective computing, and generative AI, the model illustrates how AI personalizes multisensory brand communication to enhance cognitive anchoring, emotional congruence, and brand distinctiveness. The dynamic feedback loop further emphasizes AI's role in continuously optimizing sensory experiences based on real-time consumer data.

6.2 Theoretical Contributions

The research bridges a critical gap in marketing literature by moving beyond static sensory marketing models towards a dynamic, AI-driven approach. This conceptual advancement provides scholars with a new lens to investigate the intersection of technology, cognition, and consumer behavior, thereby enriching theoretical understanding and opening new avenues for interdisciplinary research.

6.3 Managerial Implications

Managers and marketers are encouraged to adopt AI technologies to design personalized, multisensory marketing strategies that resonate more deeply with individual consumers. This approach promises higher engagement, improved brand loyalty, and a competitive edge in an increasingly digital marketplace.

6.4 Limitations and Future Research

While the conceptual model provides a robust theoretical foundation, empirical validation across diverse contexts is necessary. Future studies should employ mixed methods, including experimental designs and longitudinal analyses, to test and refine the proposed framework. Additionally, ethical considerations around AI use in sensory marketing warrant further investigation to ensure consumer trust and transparency.

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