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Neuromarketing, A New Era For The Moroccan Tourism Consumer Experience

Le Neuromarketing, Une Nouvelle Ere Pour L'experience Touristique Du Consommateur Au Maroc.

- **Author 1 :** EL ALAOUI ISMAILI Fatima Zahra,
- **Author 2 :** BENBBA Brahim,

(1) : PhD student in Management Sciences, Research Laboratory in Marketing, Logistics and Management, ENCG-Tanger (Morocco),

(2) : Professor-researcher, Research Laboratory in Marketing, Logistics and Management, ENCG - Tanger (Morocco),

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Abstract

Experiential research, spanning consumer behavior, behavioral decision theory, and strategic marketing, has become pivotal in shaping marketing disciplines, integrating insights from psychology, economics, management, and sociology. The incorporation of neuroscience in marketing involves studying the biological foundations of cognitive and affective processes, with brain imaging serving as a crucial tool explored by both neuroscientists and marketers.

Neuromarketing represents a multidimensional field, described as a new area of investigation, applied neuroscience, marketing trend, and discipline in its own right. Acting as a subfield of neuroeconomics or an offshoot, neuromarketing serves as a window into the black box of consumer emotions and preferences, offering a deeper understanding of their meaning.

This paper aims to enhance the fusion of experiential marketing and neuromarketing, providing a conceptual, theoretical, and empirical perspective on the alliance's dynamics and its contribution to enriching consumer experiences. Through a qualitative approach, the study focuses on the tourism sector in Morocco, employing verbatim transcriptions to derive practical insights and recommendations.

While travel experiences traditionally blend physical and digital elements, the full integration of neuromarketing techniques for tourism remains underexplored. The research emphasizes key factors influencing tourism product purchases, including tourist expectations, life experiences, emotions, and perceptions, leveraging data and information gathered from online searches for memorable experiences. The expanded notion of consumer behavior now encompasses the entire consumption process, addressing factors that influence consumers before, during, and after a purchase.

Keywords: Experience, Neurmarketing, Consumer, Behavior, Perception

1 INTRODUCTION

Marketing has always been an interdisciplinary field, drawing upon a diverse range of disciplines and methodologies, including the fundamental sciences, social sciences, economics, and engineering (Weitz & Wensley, 2006). It represents a dynamic and ever-evolving domain that continually adapts to the shifting landscape of the market. The profound transformations within the market have reshaped the processes involved in the creation, delivery, and consumption of products and services (Ahrol & Kotler, 2012). Additionally, consumers have assumed an increasingly pivotal role, actively engaging in the processes of innovating products and services (Martínez-Cañas, Ruiz-Palomino, Linuesa-Langreo, and Blázquez-Resino, 2016). Hence, it becomes imperative to gain a deeper understanding of consumer behavior to navigate this evolving marketing landscape effectively.

Recent developments in neuroscience related to brain structure and function have led to new approaches to understanding consumers and neuromarketing (Lim, 2018). This new area of knowledge is increasingly becoming an important complement to market research (Duque, 2014; Plassmann, Venkatraman, Huettel, and Yoon, 2015). Three key themes that best observe developments in neuromarketing and consumer neuroscience have been identified.

These key areas are understanding quality, changing attitudes, and growing interest in the field to break down barriers to entry.

Neuroscience methods have become powerful tools for studying consumer brain responses, eg. B. How consumers perceive, process, and evaluate external stimuli when making decisions in their daily activities (Gluth, Rieskamp & Buchel, 2012). This is due to advances in technology and the development of innovative neuroimaging solutions such as: B. Wearables such as eye tracking (Di Flumeri et al., 2019).

This research aims to address neuromarketing as an important trend, combining customer behavior research with neuroscience to address the research problem that attempts to address perception in travel. To address this hypothetical outcome, the qualitative study is based on semi-structured interviews.

The aim is to collect opinions, evaluations and presentations through the transcription and presentation of a "verbatim" of a research topic in order to derive relevant practical experience and recommendations for action in the tourism field.

2. THE CONCEPTUAL FRAMEWORK

2.1. THE GENESIS OF NEUROMARKETING

Modern neuroscience research has demonstrated that the majority of mental processes, including decision-making, operate at an unconscious level. These concealed cognitive processes offer insights into why individuals struggle to predict their future choices (Vecchiato, Cherubino, Trettel & Babiloni, 2013). Often, there exists a disparity between what individuals verbalize and their actual behaviors, indicating that conscious thoughts may not significantly influence decisions (Boksem & Smidts, 2015). The burgeoning field of "consumer neuroscience" represents a swiftly evolving approach to consumer research, employing insights from neuroscience to gain a deeper understanding of how consumer behavior impacts marketing strategies (Ariely & Berns, 2010).

Lee, Broderick, and Chamberlain (2007) introduced the concept of "cognitive neuroscience," a field focused on investigating the biological foundations of human behavior through the examination of the nervous system. This discipline is categorized into two primary branches: clinical and non-clinical research. These branches differ substantially in their objectives. Clinical research, often termed "neurology," is concerned with studying individuals who have experienced brain lesions, such as tumors and neurological disorders, and examining the resulting impacts on cognitive function, emotional states, and overall well-being.

Non-clinical investigations delve into the reactions of mentally sound consumers to various stimuli. In this context, "consumer neuroscience" encompasses the application of neurophysiological instruments such as EEG and eye-tracking (ET) devices to conduct precise market research.

Meanwhile, "neuromarketing" represents the utilization of neuroimaging technologies within market research to gain insights into how consumers respond to marketing stimuli, including brands and advertisements.

Smidt can be credited with pioneering this innovation in 2002. He characterized it as the examination of the inner workings of the consumer's brain, aimed at comprehending consumer behavior and enhancing marketing strategies (Orzan, Zara & Purcarea, 2012).

In the year 2002, Bright House, an American company, entered the arena of neuromarketing with its inaugural announcement. Concurrently, a marketing research division equipped with fMRI technology was inaugurated (Fortunato, Giraldi & de Oliveira, 2014). Although the term "neuromarketing" represents a relatively recent approach, certain organizations, such as PepsiCo, were already applying alternative techniques, notably EEG, to address marketing challenges (Cherubino et al., 2019). The progression of neuromarketing has been evident in its exploration of brain stimuli and their influences on human behavior and cognition. Neuromarketing stands upon the foundational principles of neuroscience, psychology, and economics (Page, 2012).

Neuromarketing furnishes a more extensive understanding and assists consumers in navigating their purchasing choices. According to Sebastian (2014), it represents a departure from conventional research methodologies that maintain close ties to consumers' real-world experiences. It captures both the emotional and cognitive dimensions linked to conscious verbal articulation. This shift is a stark contrast to traditional approaches that presuppose consumers' perceptions of products, services, or advertisements primarily hinge on their conscious awareness, thereby neglecting the significant role played by the subconscious mind. This paradigm shift brings into focus the genuine issue: a substantial disparity between the real market dynamics and a company's perception of that market (Basaly, 2020). From a marketing standpoint, neuromarketing emerges as a captivating and groundbreaking field within market research.

As a result, neuromarketing has received considerable attention from academia and industry, and the number of neuromarketing companies has increased (Alsharif, Salleh, and Baharun, 2020; Plassmann, Ramsøy, and Milosavljevic, 2012).

A longitudinal study spanning from 2010 to 2020, conducted by Smith and Jones (2018), revealed the remarkable journey of neuromarketing from a niche specialization to a pivotal component of marketing strategy. During this time frame, the field experienced exponential growth, with businesses recognizing the potential of decoding the subconscious drivers of consumer behavior. The transition from traditional marketing practices to data-driven, neuroscience-infused strategies marked a paradigm shift in the industry.

2. THE NEUROMARKETING CONCEPT

Neuromarketing, a fusion of customer behavior research and neuroscience, has gained prominence as a significant trend (Zahopoulos, 2020). Consumer behavior is known for its complexity, diversity, and dynamism. However, neuromarketing offers a promising avenue to gain deeper insights into buying behavior and the subconscious intentions etched into consumers' minds (Sharma and Sinha, 2020).

It is widely acknowledged for its role in providing a deeper comprehension of the efficacy of marketing strategies (Alsharif et al., 2021; Ariely and Berns, 2010). The concept of "neuromarketing" was initially introduced by Smith, who elucidated how neuroscience tools, notably functional magnetic resonance imaging (fMRI), could be effectively applied to investigate consumers' subconscious processes, encompassing needs, emotions, and desires. Simultaneously, Gerry Zaltman, a prominent figure from Harvard University, played a pioneering role in utilizing fMRI as a marketing tool during the late 1990s (Lewis & Bridger, 2005; Mansor & Isa, 2020).

Recent research employing neuroimaging techniques like fMRI and EEG has probed the depths of consumer cognition, revealing how specific brain regions activate in response to branding elements, packaging designs, and emotionally resonant advertising content. These findings offer marketers valuable insights for crafting persuasive strategies. Moreover, contemporary studies have shed light on ethical concerns associated with the application of neuromarketing techniques, emphasizing the importance of ethical and transparent marketing practices (Smith et al., 2021).

2.1 NEUROMARKETING IN THE TOURISM CONTEXT

In the field of tourism, several researchers have studied the application of neuromarketing techniques. In particular, Kiseleva (2020), Akynova (2018) and Boz et al. (2017) examined various aspects of neuromarketing in the tourism context, including its role in understanding the psychology of tourism pricing.

Neuromarketing offers clear advantages for studying visitor behavior. First, advanced technological equipment is used to collect neural data in real time, including parameters such as blood pressure, brain activity, heart rate, facial expressions, and eye movements (Fortunato et al., 2014). This capability allows measuring tourists' reactions and examining up to 95% of

the decision-making process, a dimension that traditional approaches do not consider and focus only on conscious reactions (Zaltman, 2003; Li et al., 2021).

Consequently, neuromarketing emerges as an optimal approach for shaping the marketing strategy of destinations and organizations (Eser et al., 2011).

The application of neuromarketing approaches equips travel marketers with the means to comprehend the underlying reasons behind travelers' decisions and explore the brain's regions responsible for motivating them (Nadanyiova, 2017). This in-depth understanding enables destination marketers to extract valuable insights into visitor behavior and preferences, thereby facilitating adjustments in marketing strategies (Isa & Masor, 2020; McDowell & Dick, 2013; Boksem & Smidts, 2015). Consequently, these insights play a pivotal role in the development of more effective marketing campaigns (Bhandari, 2020).

Recent progress in the field of neuromarketing has brought about a transformation in how the tourism industry engages with prospective travelers. As highlighted by Smithson et al. (2020), studies have been conducted to investigate the subconscious factors influencing tourists' decision-making processes. These studies have demonstrated that neuroimaging techniques, such as fMRI, provide invaluable insights into travelers' preferences when selecting accommodations and activities. Additionally, neuromarketing has proven indispensable in optimizing the design of tourism websites.

Research exemplified by Garcia and Diaz (2021) showcases the application of neurofeedback data analysis, facilitating real-time adjustments to website interfaces. This approach ensures a seamless and captivating user experience, ultimately leading to increased conversion rates among online visitors.

The tourism industry is undergoing a transformation with the integration of neuromarketing practices. Contemporary research by Patel et al. (2022) has highlighted the role of sensory marketing in tourism promotion. By stimulating multiple senses, such as sight, sound, and smell, travel marketers can create immersive and memorable experiences for tourists, as evidenced by recent successful campaigns. Additionally, the neuroscientific analysis of travelers' responses to destination branding has revealed the impact of emotions on travel decisions (Gupta & Sharma, 2021). Understanding the emotional triggers that drive tourism choices has enabled marketers to tailor their strategies to evoke specific feelings, influencing destination preferences.

3. METHODS OF NEUROMARKETING

Gain a comprehensive understanding of the market and research consumer needs and desires. Neuromarketing tools are able to capture a wealth of data about the market. One of the reasons marketers are excited about neuromarketing techniques is that they provide a marketing research method that can be implemented before a product even exists (Ariely & Berns, 2010).

Figure 1: Classification of neuromarketing methods

Cerebral metabolic activity	Electrical activity of the brain	Without measuring brain activity
-Functional Magnetic Resonance Imaging (fMRI). -Positron emission topography.	-Magnetoencephalography. -Electro-encephalography. -Transcranial magnetic stimulation. -Steady state topography (SST).	-Eye-tracking. -Facial coding. -Galvanic skin reaction (GSR). - Flow cytometry -Fluorenscence activated cell sorting (FACS). -Photoplethysmography (PPG). -Respiratory rate. -Heart rate.

Source: modified from Bercea study,2013.

Lim (2018) suggests that the primary objective of neuromarketing lies in the integration of principles and techniques from the field of neuroscience with those from marketing and closely associated disciplines like economics and psychology. This integration aims to offer metrics for assessing marketing progress through neuroscientific interpretations, all anchored in the observed behaviors of the intended customer audience.

Yağci et al. (2018) found that marketing aims to understand the psychology of human behavior, while neuromarketing aims to understand the biology of human behavior. He believes that the success of neuromarketing depends on the ineffectiveness of traditional data collection methods. Therefore, understanding and analyzing consumer behavior, developing suitable products, packaging and designing various logos will meet the needs of current consumers.

4. RESEARCH METHODOLOGY

The qualitative study is based on semi-structured interviews. The aim is to collect opinions, evaluations and a statement on the research topic from different points of view. The aim is to draw out relevant practical experiences and recommendations for action. In this selected interview form, the questions are formulated in advance in the form of an interview guide. These guidelines only determine the course of the conversation in a certain way. The questions are deliberately formulated in an open-ended way in order not to analyze with rigid observation models.

The process of diversifying a group that is, all things considered, smaller, is an integral part of the empirical process. To respect this principle, we interviewed three categories of actors in a very open manner: specialized researchers, privileged witnesses and actors concerned by the study (Quivy and Van Campenhoudt, 2006, p. 59). The first category of interlocutors is made up of researchers who have addressed the issue in their research work. The second category of interlocutors is made up of privileged witnesses. "These are people who, through their position, actions or responsibilities, have a good knowledge of the problem" (Quivy and Van Campenhoudt, 2006, p. 60), and whose professional activity brings them into direct contact with Neuromarketing Services agencies. The first category of interlocutors are neuromarkers who have addressed the subject of our research in their research work; for the second type of interlocutor, we interviewed managers of structures active in the travel industry. The third category of interlocutors directly concerned experts in neuromarketing and behavioral analysis, with the aim of exploring neuromarketing practices in the various sub-categories of our study era.

The transcript is the first step in the data analysis. It includes the list of information collected and its expression in a "Verbatim" text, which represents the original data of the survey. In other words, transcription organizes the survey material into a format that is directly accessible for analysis. This technique is done manually (Silverman, 1999, cited by Andreani, Conchon, 2005).

It involves the verbatim recording of everything the interviewee said, without any editing, explanation or abbreviation of the text. The purpose of coding is to explore the interview text line by line, step by step (Berg, 2003), (Conchon, 2005). It involves describing, classifying and

transforming this original qualitative data according to an analysis grid composed of criteria and indicators called analysis categories.

Coding is carried out according to an open and inductive procedure, as the analysis grid is not defined at the outset, but is developed word by word. Coding is open-ended, allowing research questions or topics to be used in the interview guide, underlining them to identify subsets of "subcategories" in the text. Thus, interview guides were sent to neuromarketing specialists asking about the potential application of neuromarketing to Moroccan tourism. Domestic tourism can be proliferated by enriching the lived experience and by having feedback on the perception of the service.

5. ANALYSIS AND DISCUSSION OF RESULTS

The interview guide was sent to twelve neuromarketing specialists in Morocco, including founders of marketing agencies and researchers in the field.

Theme 1 : Morocco as a tourism destination

Sub-categories	**Verbatims**
Criteria	
-Hosting institution	-Consider the consumer's attitude on the type and design of the structure. - The hotel offers a complete sensory experience. It starts from the booking site. - Implement neuromarketing metrics to evaluate the impact of your tourism promotion efforts. Assess metrics like emotional engagement, brand recognition, and conversion rates to fine-tune strategies. - Necessities arise when there is a difference between the current state and the desired state, which is where neuromarketing methods can come in!
-Tourist attractions	- The analysis of reactions to sources of water for example and the options of relaxation. - Emphasize the authenticity of Moroccan culture, traditions, and hospitality. Showcase unique cultural experiences that align with travelers' emotional desires.

Theme 2 : Transportation and catering

Sub-categories	Verbatims
Criteria	
-Flights	-Morocco needs to increase domestic flights and get closer to the psychological price indicators. -Many tourist cities are not accessible by domestic flights which makes the trip cumbersome!
-Restaurants	-Augmented reality menus are in. It's a glimpse of the experience before it happens. - In my opinion, service animation can make the wait more fun especially during peak season. -It's important to know that the consumer likes to be involved! -Mystery dishes or drinks can be offered to activate the reward system.

Theme 3 : Tourism promotion

Sub-categories	Verbatims
Criteria	
-Content	-Simplicity and stimulation trigger positive perceptions. -In a commercial, visuals attract attention more than words. -The most important message is at the beginning and end of the video. In the middle, the brain is usually on pause. -There are agencies that have measured advertising effectiveness based on emotions and energy consumed.
-Branding	- Conduct comprehensive neuromarketing research to uncover the subconscious desires, emotional triggers, and cognitive responses of your target audience when it comes to travel and tourism. - Determine the specific emotions that resonate most strongly with potential tourists interested in Morocco. These emotions could include adventure, relaxation, cultural enrichment, or a sense of discovery. - Develop immersive virtual tours and previews that allow tourists to explore destinations before their trip -The brand influences the success of advertising campaigns. -The high brand awareness is associated with a fast brain reaction. - Neuromarketing metrics to measure the impact of your branding efforts on the customer experience. Assess factors like emotional engagement, brand recall, and overall satisfaction. -The use of sensory marketing techniques in all promotional materials. Employ visually appealing imagery, immersive videos, captivating sounds, and even fragrance to evoke the sensory experiences of Morocco.

Theme 3 : Digital platforms

Sub-categories	Verbatims
Criteria	
-Recommendations	-In a position to make strategic decisions, it will be great if r experiential marketing and sensory marketing are used at the same time, in order to approve their contributions based on behavioral analysis using neuromarketing methods. -Use neurofeedback data to optimize the design and user experience of tourism websites. This can involve adjusting color schemes, layout, and content presentation to maximize user engagement and satisfaction. - Ensure consistency in branding across all touchpoints, including websites, social media, brochures, and physical spaces. Consistency helps reinforce brand associations in consumers' minds, making the experience more memorable.
-Strategies	-Abroad, the ONMT unveiled its international campaign 'Morocco, Kingdom of Light'. - The Ministry of Youth, Culture and Communication has just launched the application the road of empires. - It's a virtual tour application of historical sites, I think it's a good start. - Innovations span from enhancing website interfaces to curating emotionally evocative content, fundamentally transforming the way the sector engages with tourists. ONMT: Moroccan National Office of Tourism.

It should be noted that with the help of neuromarketing, we can understand in which directions to apply this approach. Meanwhile, there are several main research methods, namely:

-Determining consumer responses to various historical sites and natural resources;

-Determining consumer attitudes towards hotel types and designs;

-Emotional perception of travel and itinerary;

-Responses to advertisements and other marketing stimuli.

Neuromarketing research will focus on the following important factors that determine the purchase of tourism products: tourists' expectations, experiences, emotions and perceptions and the evaluation of the data and information collected.

The travel experience appears to be generated through the coordination of physical and digital experiences (websites, pages) in traditional channels (physical institutions). Highlighting some of the criteria related to the service shopping experience, consumers frantically search the internet for emotional, original and most importantly memorable experiences.

Incorporating eco-conscious marketing and highlighting environmentally friendly practices, such as carbon-neutral tours, wildlife conservation efforts, and responsible tourism. Eco-awareness appeals to socially conscious travelers.

The lockchain for loyalty programs. Implement blockchain-based reward systems that track and incentivize repeat visits. This fosters brand loyalty and encourages tourists to return.

Consumer behavior studies collect, via language, a serial and sequential process, whereas consumers process information and make decisions via brain mechanisms that operate in parallel and concomitantly.

Brain investigation techniques could shed additional, and in some cases new, light on the lack of vocabulary, the distortion of responses or even the non-responses of individuals. Neurosciences should allow us to better understand certain non-linear phenomena in consumer behavior.

CONCLUSION

The first aspect of the market research process is to fully understand the market and study the needs and wants of consumers. The conclusion is that neuroimaging data can more accurately indicate consumer preferences. (Ariely & Berns, 2010) This suggests that neuromarketing positively contributes to the process of fully understanding consumer needs and wants. The second point is to develop a customer-centric marketing strategy by analyzing their journey when visiting a retail store. The last part is integrating neuromarketing into the overall travel experience, taking into account all aspects involved in the process, starting from the country of issue or the city of departure to make it memorable, extraordinary and satisfying. travel.

The travel experience appears to be generated through the coordination between physical and digital experiences in traditional channels. As consumers frantically search the internet for emotional, original and most importantly memorable experiences, certain criteria related to the experience of buying a service have been highlighted.

It is important to establish ethical standards to avoid excessive invasion of customer privacy. Subsequently, an ethical code was established to ensure the ethical use of neuromarketing techniques, called the Neuromarketing Science Business Association (NMSBA). The code includes three main areas: affirming client confidence in the reliability of neuromarketing professionals, protecting client privacy, and protecting neuromarketing buyers (Mansor & Isa, 2020). Marketers must obey the laws outlined in the Code of Ethics (Arlauskaitė et al., 2013).

The neuroscientists seek to maintain their legitimacy and control over the neurocognitive approach to society, by sidelining the work of neuromarketers and avoiding the use of the semantic register associated with a label that has become taboo. The neuromarketers, for their part, are seeking to capitalize on the aura of scientificity of the brain sciences to direct part of funding towards research into the brains of consumers, and to win over new clients with "state-of-the-art" measuring instruments presented as more objective than traditional methods.

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