

Department of Business and Management

Master's Degree in Marketing: Market Relationship & Customer Engagement

Chair of Marketing Communication and New Media

# AI-Driven Emotional Advertising: Semiotic and content analysis of commercials developed with AI

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## **Abstract**

This thesis explores the impact of artificial intelligence (AI) on emotional advertising, with a focus on the semiotic and content analysis of AI-generated commercials. The research is part of marketing communications, highlighting how the integration of AI technologies is redefining creative and consumer engagement processes. The first part of the paper deals with a literature review that analyzes the evolution of AI in marketing and its role in strategic decision-making processes, from segmentation to personalization of promotional campaigns. Next, the thesis examines the concept of emotional advertising, delving into how AI can amplify the emotional connection with audiences through advanced technologies, such as Natural Language Processing (NLP) and automated emotion analysis.

In the experimental part, a semiotic and content analysis was conducted on a selected corpus of commercials to investigate the emotional reactions aroused in consumers. Viewers' comments on social media were analyzed to understand how the emotions expressed correlate with the effectiveness of advertising messages. The work also discusses the ethical implications of the use of AI, such as emotional manipulation, data privacy, and the risk of invasiveness, while proposing managerial strategies to apply the results in the business context. Finally, it reflects on the future potential of AI in the field of emotional marketing, suggesting research directions to further improve the effectiveness and creativity of advertising campaigns..

# Literature Review: Foundations of AI in Marketing

This chapter delves into the principles of Artificial Intelligence (*AI*) in marketing, commencing with an overview of the development and present condition of AI and marketing. We'll examine how AI has developed into a key component of contemporary marketing, examining its uses in more extensive marketing contexts and how it makes creative approaches possible. Furthermore, we focus on AI's pivotal role in emotional advertising, illustrating how it integrates technology and human insight to forge deeper connections with audiences, thereby enhancing the effectiveness and resonance of advertising campaigns. This exploration not only sheds light on AI's transformative impact on marketing but also underscores its potential to redefine engagement and creativity in the digital age.

## 1.1 Introduction to Marketing and AI: Evolution and Current State

Marketing is a crucial function within any sales organization, focusing on creating, communicating, distributing, and exchanging offers that have value for customers, partners, and society at large. Marketing, in its traditional sense, is the process of identifying the requirements and desires of customers, developing goods or services to satisfy those needs, choosing the best pricing, advertising these goods or services to the right target market, and effectively distributing them. The formal definition of marketing is provided by the AMA, the American Marketing Association: "Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large" (Kotler et al, 2017, p. 6). Over time, marketing has moved closer and closer to technology. A partnership that has strengthened more over the years. Technology is an integrant part of life and customers have increased across time their ability and knowledge about tech. This has translated into increased investment in technology by companies to change the way they interface and operate in the market (Kumar et al, 2021).

In the panorama of possible technologies, four stand out for their importance and impact. These are:

• Internet of Things (IoT): This term refers to a technological concept that describes the network of physical devices, vehicles, appliances, and other objects that incorporate sensors, software, and internet connectivity, allowing them to collect and exchange data (Oracle, 2024). Through automation and real-time data collecting, IoT expands the internet's reach to include commonplace objects and devices. This allows for automated communication and

interaction amongst various devices, enhancing the efficacy, ease, and efficiency of daily chores.

- Artificial Intelligence (AI): a field of computer science that works with developing machines that can carry out jobs that would normally require human intellect (Sheik and Schrijvers, 2023). These include the capacity for reasoning, recognizing connections and parallels, gaining knowledge from experience, and making choices in unpredictable or changing situations. In the course of the next few paragraphs, we will deepen the concept by providing an even deeper definition of the subject at hand.
- Machine Learning (ML): Within artificial intelligence lies the field of machine learning. This field focuses on creating statistical models and methods that enable computers to carry out specified activities without the need for explicit programming (El Naqa and Murphy, 2015). By processing a lot of data, these algorithms become more efficient or "learn". In order to increase the effectiveness and precision of AI applications, machine learning aims to provide systems with the ability to automatically recognize patterns in data, adapt, and make predictions or judgments based on practice.
- *Blockchain:* Distributed ledger technology, or blockchain, keeps an immutable, digital, encrypted record of all transactions (Yaga et al, 2019). A chronological chain of data is formed by connecting each block in the chain, which has several transactions, to the block before it once they are finished. Because of its structure, the blockchain is especially safe from unauthorized alterations because changing one block would also need changing all of the blocks that come after it. Although blockchain technology is most commonly associated with cryptocurrencies like Bitcoin, it has numerous additional uses in fields like finance, healthcare, and law where data security and transparency are essential.

The IoT is expected to spread more widely, along with its plethora of smart, linked products (Columbus, 2017). the proliferation of connected devices and new technologies has led as a domino effect to a greater investment and implementation of technologies based on ML and data analysis through AI, a goal that was already foreseen before the current scenario was defined (Dixon, 2016). Specifically, AI is applied in multiple ways and in various contexts. Technological evolution has led AI to be one of the most powerful tools in marketing.

## 1.1.1 AI: what is Artificial Intelligence

We can understand AI as a technology that possesses the ability to imitate humans, as well as to accomplish tasks intelligently (Thompson et al; Siau, 2017; Russel and Norvig, 2020).

AI's intelligence is based on its ability to learn and learn autonomously. Each completed task therefore allows the AI to increase its knowledge and skills in order to develop new capabilities to generate insights, increase its efficiency and its effectiveness for future tasks. In addition, AI has the ability to learn from experience, which allows it to make intelligent choices, like humans, as well as to generate responses based on previous experiences stored in its knowledge (Wu, 2019; Goodnight). By replicating human intelligence, AI therefore has the ability to self-correct, also through the experience acquired (Marinchak et al, 2018; Kaplan, 2021).

The term "AI" was coined in the '50s but has become relevant in recent years. First research about artificial intelligence was focused on problem solving and symbolic methods. Then the authors started focusing on data analysis and use aimed at a more accurate segmentation and profiling of consumers.

A fundamental turning point was the advent of *Customer Relationship Management (CRM)*. The term "customer relationship management," or "CRM," refers to the methods, tools, and techniques used by companies to track and evaluate consumer interactions and data over the course of the customer lifecycle in an effort to strengthen client bonds, promote customer retention, and boost revenue (Paas and Kuijlen, 2001). CRM systems are made to gather data on customers from a range of sources, such as websites, social media, email exchanges, and more. This gives companies a complete picture of the activities and preferences of their customers, enabling them to tailor their marketing campaigns and provide better customer care. CRM systems and *data mining*, which took hold especially in the 1990s, have made it easier to manage customer interactions, tracking, and more effective and efficient data analysis.

Since the 2000s, with the introduction of machine learning and its algorithms to analyze data, to obtain insights and develop a preference prediction capability, AI-based recommendation systems have emerged.

By AI we generally mean several types of subfields, such as the aforementioned Machine learning, but also *deep learning* or *Natural Language Processing*. NLP is the ability of computers to analyze, understand, and generate human language (Nadkarni et al, 2011). This allows people to interact with machines through common language.

## 1.1.2 Types of AI

There are three types of artificial intelligence, which differ in particular in the type of cognitive abilities. They are: *Artificial Narrow Intelligence*, *Artificial General Intelligence*, *Artificial Super Intelligence* (Pitt et al, 2023).

Narrow Intelligence is the most widespread and widely used type. It is used to perform specific individual tasks. It makes use of a single set of cognitive abilities compared to human intelligence. This does not make it less skillful or important, as examples of applications of this type range from virtual assistants such as Apple's Siri to algorithms for cancer prognosis. *OpenAI's ChatGPT* also falls into this category. Within this group we find everything that does not possess a consciousness or self-consciousness, is unable to carry out tasks other than those for which they are programmed. General AI, on the other hand, concerns those computers that have an agency that can be applied to each problem and that can also perform multiple tasks simultaneously. To date it is still largely a theoretical construct, the goal is in the coming years to be able to make it real and available (Sandonnini, 2024). General AI abilities would make it unrecognizable to human intelligence, given the amount of cognitive skill sets it can use.

Super AI refers to the capabilities of machines that would be able to surpass human intelligence and become aware of their being. Due to its nature, there is currently a lot of debate about its impact and function.

# 1.2 AI and Marketing: when worlds collide

The ability to analyze a large amount of data in a very short time has an impact on marketing and more specifically, on very important digital marketing. Just think of the time that is saved and can be used for other phases of projects or to improve what has been achieved with the help of artificial intelligence. Taking advantage of the capabilities of AI in the marketing field allows you to obtain and generate insights, better guide the consumer throughout the customer journey, trying to obtain the best result in terms of experience (Hildebrand 2019; Pitt et al, 2018). Data analytics allows you to better understand what your customers want. Firms and marketers can achieve results without investing lots of resources in failed attempts (Peyaravi et al, 2020).

There are countless ways in which marketing can be used, the most common being:

Personalization: AI's ability to analyze massive amounts of data in a very short time allows
companies to obtain customer behavior patterns, which are used to create highly personalized
customer experiences.

- 2. *Campaigns' optimization*: AI can test various versions of a promotional campaign in real-time to see which combination of elements, such as calls-to-action or images, works best for the target audience.
- 3. *Customer's behavior prediction*: Data analysis allows you to make a prediction of future consumer behavior, as well as market trends.
- 4. *Customer service automation*: The help of chatbots and virtual assistants that use AI allows you to be more rapid in responding to customers and automate processes.
- 5. *Sentiment analysis*: AI makes it possible to analyze the different feedback that consumers give on social media and other online platforms. This translates into useful insights to improve the company and its products and services.

## 1.2.1 Different Uses of AI in Marketing Sectors

The main guidelines for directing the use of AI-based systems in marketing are Product, Pricing management, Promotion, Strategy and Planning, Place management. In addition, there are other areas that are important and essential, but not as crucial as the former. These include targeting and positioning, situations, and thinking models towards the product design and end-customer needs (Lai and Yu, 2021).



Figure 1.1: Al application in marketing sectors.

(source: Haleem, A., Javaid, M., Qadri, M., Singh, R., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing:

A literature-based study. International Journal of Intelligent Networks, 3)

Marketers are using AI to increase customer demand. On the other hand, customers benefit from the use of AI. Their user experience is significantly improved when artificial intelligence is used.

An automated system, with the help of an integrated marketing approach, allows companies to gain a competitive advantage. Examples of this are micro-management of customers and facilitated decision-making in the choice of the best solutions.

#### 1.2.2 From traditional Marketing to AI Marketing

In a world where the attention span tends to be zero (Helgesson and Stojkovic, 2023), i.e. it is getting thinner, it is necessary to create campaigns and advertisements that consumers find relevant to them and that match their needs. The data is then used to create targeted advertising campaigns. Thanks to this, you can be sure to interact with the chosen target audience, i.e. the one that will react best to the exposure of the campaign.

How to do this? Marketers used machine learning algorithms to distinguish customer behavior, including purchase, current conversion, and exploration. Once the behavior is detected, the algorithm redirects prospects in order to get a more likely conversion (Kühl et al, 2020).

Another very useful application is facial recognition software, which monitors the behavior of consumers in the store, and then uses the most appropriate images in social communication with them. Combining this software with a notification system, on the other hand, allows the customer to be informed, enriching their experience (Kose and Sert, 2016; Kreutzer and Sirrenberg, 2020).

Segmentation can also be done better with the help of AI. By using artificial intelligence together with quality data, you can achieve more effective results and faster (Puntoni et al, 2021).

Predictive marketing analytics are also widely used. The analysis of data related to previous occupations allows AI to generate insights that can provide a prediction of a possible future performance trend (Shovo, 2021). This ability to forecast makes it possible for companies to better allocate resources in favor of a more efficient and effective use of time.

From the initial stages of programming to the more advanced stages of customer conversion and retention, AI plays a fundamental role. This gives companies that make advanced use of AI gain a competitive advantage. The ability to refine marketers with machines capable of performing advanced functions in a short time is radically changing the world of content marketing (Zeeshan and Saxena, 2019; Abinali and Hamdan, 2020).

## 1.2.3 AI and Marketing: general overview

Artificial intelligence is used as a tool in advertising and marketing campaigns in a variety of industries. They range from finance to personal care, passing through sectors such as health, entertainment, retail, videogames.

The use varies depending on the purpose requested. As seen above, there are several ways to use AI and multiple architectures that can be exploited to achieve the desired results. You can try, for example, to achieve better performance for your campaigns, improve the user experience of customers or their loyalty.

Think, for example, of Programmatic advertising. This consists in the automated process of real-time purchase of advertising spaces that have a selected target as an audience, which is carefully chosen after the analysis through Machine Learning algorithms of data left by users while browsing the web. Once the most accurate target has been selected, they will place a bid in real time to acquire the right space.

AI can also be used to make the various stages of campaign execution as clean as possible. That is to say, artificial intelligence can be used to try to reduce errors, integrating human supervision with the speed and efficiency of machines (Grover et al, 2020).

As seen above, artificial intelligence allows you to reduce the time of the phases of advertising campaigns, as well as to cut costs through the reduction of errors already mentioned. This results in a higher return on investment and increased efficiency.

In fact, artificial intelligence is a tool that shuffles the cards in marketing, as well as in other sectors. It offers innovative new opportunities to optimize its marketing processes and strategies, as well as to enrich and improve the customer journey and experience. It also allows you to improve and optimize how businesses attract, convert, and retain potential consumers.

Thanks to artificial intelligence, marketers can create a segmentation of customers by key groups, making various focuses on niches, which will allow them to direct the creation of content and the management of their customer journey in a specific way. Through AI, the care of the prospects will improve, and this has a positive impact on engagement. Visitors will find themselves in front of material that is relevant and impactful with respect to their characteristics, which translates for the company into greater expertise in the sector (Varsha et al, 202). A typical example is personalized messages and targeted suggestions for consumers.

As far as personalization is concerned, through artificial intelligence applications, it is possible to modify the contents on websites and apps, to adapt them. This is a first step for personalized marketing campaigns that aims to get more engagement.

Current technologies based on AI and ML are moving in this direction. AI chatbots, which improve their ability to interact with people through machine learning algorithms, allow consumers to have a better, completer and more "lifelike" online and mobile experience. These tools help the consumer in his purchase journey in the pre, during and after phases, offering the possibility to answer questions about the purchase or the product or service, often resorting to answers to common pre-recorded questions, or also directing the customer to a human operator able to respond to the most complex situations.

Although sometimes not implemented in the most commendable way, these tools are very useful for businesses. These allow you to collect countless amounts of data quickly and reduce the need for staff for businesses. In this case, however, we have the other side of the coin that reveals an increasing desire for workers to lose their positions due to the emergence of these technologies (PWC, 2022; Rociola, 2023), hence a growing social tension that contrasts with the innumerable advantages often praised. However, it must be said that these instruments are among the best modern data collectors and allow to break down several organizational barriers.

Another good example of an area where the use of artificial intelligence has allowed it to achieve better results is pricing, specifically dynamic pricing. Dynamic pricing modules, managed through artificial intelligence, allow companies to determine what are the optimal prices for their products and services. This allows companies to determine the most competitive price and maximize profitability, all achieved in a much shorter time (Rabby et al, 2021; Zao et al, 2022).

Another context in which artificial intelligence is able to give added value is retargeting. Retargeting refers to the actions taken to recover the audience that comes into contact with our brand but then abandons the purchase process or loses interest (Maggio, 2018).

Through artificial intelligence, especially with machine learning algorithms or deep learning, it is possible to monitor the history and past purchases of potential consumers in real time. In this way, patterns of consumer behaviors, patterns and trends are identified, which lead to a more focused retargeting campaign and therefore able to be more effective (Xu et al, 2022).

At the end of this general overview, it emerges that AI is on the one hand a tool for optimizing and customizing strategies, and on the other hand also a tool capable of driving innovation in the sector.

Artificial intelligence possesses skills capable of shaking up the current marketing landscape, opening up new horizons with a view to greater targeted interaction with the customer.

In the following sections, we will take a closer look at the most significant applications of AI in marketing, briefly observing how it is declined in various sectors.

## 1.3 AI and Marketing Strategy

## 1.3.1 Segmentation

By market segmentation, we mean a division of the market into groups that have unique characteristics, wants, and needs. Components of each segment have common characteristics that make them different from elements in another segment. We can segment the market in many different ways based on the criteria we choose to apply to the process, for example we can use gender, age groups or buying habits.

Through the use of AI, such as mining techniques or grouping, we can identify trends and patterns from the data. This allows us to segment the market (Mandapuram et al, 2020), whether it is a question of disaggregating a single market into segments, which can also be composed of a single consumer, or of bringing together in a segment several subjects that could fall into a category. New technologies such as transfer learning make it possible to train AI in order to make it able to work even on less rich data sets, starting from what has been previously learned from better data (Wang, 2017).

Data mining, on the other hand, allows data to be analyzed in depth, finding patterns that would otherwise be difficult for human operators to spot. So, data mining allows for better results in clustering (Valls et al, 2018). An example of this can be the use of text mining combined with ML to analyze the loan market and identify those who are considered good customers, i.e. those who are statistically more likely to repay debt, and bad customers, those who may not (Netzer et al, 2019). Another example can be retail market, where customers can be segmented by their preferences about personalized recommendations (Dekimpe, 2020).

On the other hand, automated text analysis, or even sentiment analysis, can be used as segmentation tools to segment the market according to psychographic criteria, as can be the case in the art market (Pitt et al, 2020).

The use of these technologies does not require marketers to first decide, a priori, the segmentation variables to divide the market. AI is able to identify preferences autonomously, analyzing huge amounts of data in a very in-depth way.

## 1.3.2 Targeting

Targeting is the step following segmentation. This is the strategic choice of selecting the segment, or several segments, to be served with a specific offer designed for the target. If segmentation is a more mechanical phase, where to date even AI alone is able to operate, through the methodologies seen above, on the other hand, targeting is more complex and requires in-depth knowledge of the domain, judgment and also intuition. Different technologies and applications are used in targeting. For example, search engines use keywords and history to target searchers, or social media, which is a very useful targeting tool, as it is possible to discover users' interests (Liu, 2020; Bitner and Albinsson, 2016).

In targeting, the most widely used AI technology is recommendation engines. These are able to suggest possible end targets that will then have to be examined by marketing experts. Otherwise, predictive models are used to suggest which segments to choose. In addition, it is possible to carry out the targeting phase through the use of thinking AI. For example, statistical models and data mining can be used. Yet another example is ML and causal forests in cancer awareness marketing campaigns (Chen et al, 2020). Machine learning is also used to optimize promotional targeting to potential new consumers (Simester et al, 2020).

#### 1.3.3 Positioning

Positioning is a process that links product attributes with the benefits sought by consumers. The goal is to find a competitively advantageous position in which to position your product in the minds of consumers (Brooksbank, 1994).

Recent studies have shown how data mining techniques can be used to develop customer-based perceptual maps, providing a viable alternative to the consolidated knowledge of traditional marketers (Daabes and Kharbat, 2017). Their development starts form the analysis of the perception of the consumers.

If segmentation is a more mechanical phase and targeting is more focused on the marketers' reach, positioning instead aims to reach the "heart" of the customers, through phrases, slogans, that are able to permeate the consumer and win him over. An example of this can be the tourism sector, where the positioning slogans of the most popular destinations tend to emphasize the emotional component. This emphasis indicates the importance of emotional connection with the target audience (Gali et al, 2017).

It is possible to cite numerous examples of success in the field of slogans, such as the famous "Just do it" by Nike, "I'm loving it" by McDonald's, but also "Think different" by Apple or "Impossible is nothing" by Adidas. These are all successful examples of how effective positioning statements reach the target consumer, thus occupying a unique position in the consumer's mind, which is essential for achieving long-term success. AI is therefore an excellent support tool for making these strategic choices. In particular, applications such as emotional artificial intelligence and emotion analysis are useful for the purpose, such as developing slogans that are captivating for the target consumer.

Although it is therefore possible to use artificial intelligence for tasks related to positioning, the creativity required does not allow for complete automation and the results are often not excellent. However, there are cases of campaigns that have made use of these technologies. In 2018, Lexus, a famous car manufacturer that is part of the Toyota Group, launched a promotional campaign called "Driven by Intuition (Ansa, 2018). This was the first commercial to be made entirely using artificial intelligence. The campaign script was created using machine learning techniques. Lexus fed the ML algorithms various scripts from various award-winning luxury brands, Lexus brand data, and countless emotional data. Through this process they were able to generate a script that talks about how a craftsman, named Takumi, was able to create the Lexus ES Hybrid car.

The campaign, also created with the help of internationally renowned directors, has all the characteristics to present itself as a promotional campaign for a luxury car. However, it cannot be defined as a complete strategic success. consumer segmentation is unclear and positioning ambiguous (Rust and Huang, 2020). This shows how AI can certainly be a support tool, however it is not yet possible to fully automate the positioning process without losing effectiveness, but in the future the percentage of work left in the hands of algorithms may certainly be greater.

# 1.4 Tactical actions and Marketing Mix: AI and the 4 Ps

#### 1.4.1 Product

When we talk about actions related to the Product, we often mean the development of products or services that are commercialized to make it possible for consumers to satisfy their needs and desires (Khan, 2014).

This category includes all actions such as product design, packaging, branding, but also the services offered to the customer in relation to these actions. Storytelling can therefore be divided into two strands, on the product and branding side on the one hand, and on the consumer and customer service side on the other.

Mechanical AI can be used in the actions and processes most related to product and branding, this is because both can benefit from the standardization typical of this type of AI.

In logo design, for example, you can use machine learning algorithms similar to decision trees developed on multiple-choice questions that can automate the process. This choice of logo creation is typical especially in companies with a smaller budget, where the possibility of having a logo created by experienced graphic designers is low (Avery, 2018; Deryl et al, 2023). The results of these actions can then be easily tracked in an automated way.

You can therefore benefit from the advantages of automatization, but you need to be careful with the actions you delegate that are not related to the identity of consumers (Leung et al, 2018).

On the other hand, for actions that require more effort in terms of personalization, cognitive AI is used. We have seen analytics and how they can be used to predict trends (Dekimpe, 2020), but for example, topic modeling allows for service and design innovation. Another example can be adaptive systems, which allow marketers to customize products and services in order to better meet consumer needs (Chung et al. 2009; Chung et al. 2016; Dzyabura and Hauser 2019; Liebman et al. 2019).

Emotional AI, on the other hand, can help in product actions where greater relational skills are required. You can use chatbots integrated with AI that respond to customers' messages in order to grasp their emotional state and try to provide empathetic responses or use ML algorithms to suggest movies and TV series suitable for the indicated mood based on the mood possible. Conversational AI can be trained to have a brand personality that is suitable for responding to consumers or potential customers (Wilson and Daugherty, 2018). This greater relational capacity of emotional AI allows it to engage customers more.

On the consumer side, i.e. customer service, the issue is more complex because consumers have different reactions to using AI products. Subjects must respond proactively and willingly accept, but they must also be resistant to novelty and service. For example, in the case of the use of AI in the medical field (Longoni et al, 2019), or when trying to anthropomorphize robots (Kim et al, 2019).

Customer service is also an emotionally based activity, as well as expensive. for this reason, in order to be effective and effective, you can resort to the mix of various types of AI, mechanical, emotional and cognitive. The integrated use of these technologies in the various actions can create a loop that could lead to perpetual product improvements in the future.

#### 1.4.2 Price

The second P in the marketing mix is price. These are all those actions related to payment, setting the price, and negotiating the price. Price corresponds to the cost paid by customers to use the good or

service. All real actions at the price are standard and easily manageable through the various mechanical AI technologies available. Just think of Apple Pay, Google Pay, and all the other possible online payment methods.

Price setting is one of the most automated steps with the advent of AI, due to its mechanical and analytical nature. Nowadays, different algorithms are used to adjust the price, even in real time and with incomplete information (Misra et al, 2019). These algorithms make use of mathematical and statistical capabilities of the highest level, e.g. Bayesian inference, which also allow them to update online rates even when the information is scattered and unclear (Bauer and Jannach, 2018). It is also possible to change the price in real time by analyzing the online WOM of the customers (Feng et al, 2019) or by skimming the information about the customers that are available (Montes et al, 2019). Price negotiation, on the other hand, requires more interaction. At this juncture, emotional AI is more used as it is better in relationships.

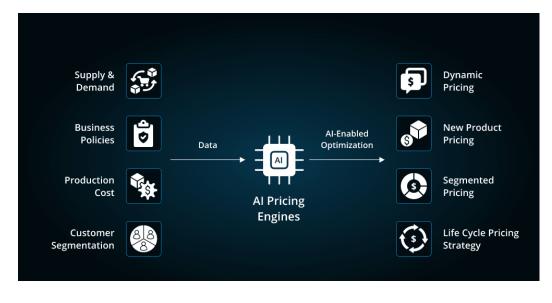


Figure 1.2: Pricing model with AI

(source: https://medium.com/predict/smart-pricing-how-ai-is-transforming-pricing-engines-a3cd4b19e675)

#### 1.4.3 Place

When we talk about Place within the marketing mix, we are talking about how the consumer can access the product, such as where they can buy it. the actions related to the place, as in the case of the product, can be divided into two macro areas:

- Retailing and frontline, where the interactions between subjects are fundamental.
- *Distribution, logistics and delivery,* where the key word is "convenience".

In retailing and frontline activities, there is greater use of embodied AI, i.e. robots. For the back-end and front-end phases, mechanical AI is used to make processes more automatic.

In the back-end retail, for example, we have the use of IoT technologies for process optimization (Grewal et al, 2018). In front-end processes, robots play an important role, allowing to "automate" the social presence in activities (Wirtz et al, 2018; Mende et al, 2019; van Doorn et al, 2017).

The use of robots in the front end is increasingly common, for example as does Giant, a supermarket chain, which uses a robot called Marty to detect anomalies and dangers in the store, such as broken and discarded products (Hasan et al, 2021). In many sushi restaurants, robots are used to transport food from the kitchen to the various tables. These activities, which are typically more routine and standard, are increasingly being automated.

In retailing, the use of AI is therefore aimed at facilitating the purchasing process of individual customers, as is the case, for example, in Amazon stores, known as Amazon GO. In these stores, you can access them by code, then various sensors detect the selected products and the price is charged to the billing method associated with your account. In addition, recognition systems allow identification and memorization of the customer. Another famous example is Alibaba's smart mirrors, powered by the Fashion AI system. These allow the customer to see themselves wearing the selected items and offer style suggestions. These technologies can then be integrated with motional AI to make the interaction more comfortable and human for customers. These types of robots integrated with technologies to be more emotional are widely used in the hotel sector, but as seen above, anthropomorphized AI increases the perception of human feeling, however it often reduces the level of sympathy. Moreover, if not integrated in the best possible way, it risks producing adverse effects such as dislike and hatred, often generated by the lack of flexibility of robots to the various problems of customers (Kim et al 2019).

The delivery, distribution and logistics phases are typically standardized phases, which are positively affected by automation. The actions carried out in the deployment phase are mostly routine and mechanical, and for this reason the mechanical AI adapts well. Robots are used to make packaging and deliver packages, IoT devices are used to monitor the performance and status of processes and to allow, for example, the reorder of previous purchases. The ultimate goal is to make processes more convenient.

Through thoughtful AI it is then possible to anticipate customer orders and provide suggestions for future purchases, while emotional AI due to the nature of the processes seen is not used.

#### 1.4.4 Promotion

The last P in the classic marketing mix model is Promotion. Promotion actually means communication, i.e. all marketing communication activities. This generally includes personal selling, advertising, digital marketing, and all direct marketing activities. The various types of artificial intelligence can be used in each of these activities.

Promotional media is characterized typically by a routine planning that can be automated with the aforementioned mechanical AI. An example can be the process of planning, programming and purchasing promotional media, which follows predefined and specific processes. It can also automate search campaigns, and keyword research, as well as various social media activities such as targeting, retargeting, as seen above, and content publishing. These automations are highly useful given the importance of always being in constant alignment with trends and the dynamic nature of social media and digital marketing.

If with mechanical AI it is possible to automate some of the processes, through cognitive AI it is possible to provide support to the activities of creation and personalization of promotional content. In this sense, we have seen the aforementioned Lexus commercial made through a script generated through AI.



Figure 1.3: Frame from Lexus Es Ad. promotional campaign written by Al

(source: https://newsroom.lexus.it/lexus-presenta-il-primo-spot-scritto-interamente-da-una-mente-artificiale-per-la-nuova-es-hybrid/)

But over the years, software has also been born that can be used to generate scripts, images and videos, such as DALL-E or Midjourney that have made the creation of content faster and easier (Wahid et al, 2023), albeit with the limits already seen in terms of creativity and emotionality.

Then there are companies that use the data to provide insights to other companies or third parties. Among these, Kantar is very famous, which through the analysis of large amounts of data is able to provide valuable analytics, useful for generating content in line with consumers' interests and thus making its communication process as entertaining as possible for consumers (Gopinath, 2019; Simon et al 2016).

In the context of communication actions, there is also room for emotional artificial intelligence (McStay, 2018). This is used to track customers' reactions to promotional stimuli in real time, then compose the content offer based on the responses collected, to offer an experience in line with the characteristics of users (Lee et al, 2018).

This concludes the analysis of the different and varied applications of artificial intelligence in strategic and tactical marketing processes. In the next paragraph we will analyze specifically how AI is used and how it is contemplated in the context of Advertising and emotional campaigns.

## 1.5 Bridging the Gap: AI's Role in Enhancing Emotional Advertising

The arrival and integration of artificial intelligence (AI) into marketing and communication strategies is causing a major shift of the advertising environment in the digital age. The fundamental objective of advertising is still to influence consumer perception and behavior, but the means by which this objective is accomplished are changing at a rate never seen before. Emotional advertising becomes a crucial pillar in this ever-changing landscape, using the power of evoking emotions to build stronger, longer-lasting bonds between marketers and consumers.

The success of a campaign is not measured only in terms of visibility or recognizability, but also and above all by its ability to emotionally touch the observer, which transforms mere visualization into the ability to remember.

In this scenario, AI is inserted. It is an instrument capable of innovating the way in which it is done and the process of implementation. In the next paragraph we will explore how AI fits into the landscape of emotional advertising, starting from a first definition of what advertising is up to how AI can strengthen the effectiveness of emotional campaigns, a theme that will then be reworked in the following chapters in more depth.

## 1.5.1 Advertising: Definition and Conceptual Analysis

Advertising is a pillar of communication and marketing. It acts as a link between companies and consumers. Being a type of persuasive communication, some of its objectives are to inform, capture interest, attract and motivate the target audience to take action, through a call to action (O'Barr, 2015). This can mean making a purchase, modifying or changing a perception, changing or modifying a behavior. There are many ways to use advertising, from promoting a good or service to providing propaganda and information. The most common form is clearly commercial advertising.

Advertising makes use of a strategic communication for the transmission of different messages, creatives and media. This is to reach and engage potential consumers, the targets.

Each advertising message is carefully thought out. Its structure is planned for the purpose that is set at the beginning. This structure is often planned to resonate with the values, wants, and needs of the audience. To achieve this result, emotions, desires, fears, or aspirations are often leveraged, all to try in some way to break through the prospect and thus be able to influence his perception and behavior. There are various ways to be able to run a promotional campaign, which in fact reflect the various preferences and tastes that the audience possesses (Vakratsas and Ambler, 1999; Tellis and Ambler, 2006).

Even though television is a conventional medium, it may reach a huge audience at once by combining sound, movement, and visuals to elicit strong emotional responses. One example of this is commercial television. Press advertisements, on the other hand, let viewers absorb information at their own pace by focusing emphasis on important topics and using strong visuals. Print still plays a big part in the market, even with the rise of digital, especially in niches where the permanence and tactile feel of the printed material enhance the advertising message.

With the introduction of online advertisements, social media campaigns, email marketing, and other digital communication channels, advertising has expanded to new heights in the digital age. Because of the unparalleled customization provided by these tools, marketers are able to target particular messages at specific audiences based on behavioral data, preferences, and past interactions. Particularly, social media platforms offer a special setting for direct interaction with customers, encouraging a two-way conversation that can improve the bond between the latter and the former. Other essential components of digital advertising include search engine marketing and search engine optimization (SEO), which guarantee that businesses' goods and services are visible and available to consumers conducting online searches at the appropriate moment. To make sure that advertising

messages are timely and relevant, these tactics necessitate a thorough understanding of the search dynamics and online behavior of the target audience.

In every instance, the medium and format for an advertising campaign are not chosen at random, but rather as part of a targeted strategy that takes into consideration the target audience's behavior, specific marketing objectives, and the cultural and media context in which the message will be conveyed. In this sense, advertising can be seen as an orchestration of media and messages, each carrying out a unique purpose and contribution, arranged so as to create harmony in the communication between companies and their clients.

Advertising is not just a promotional tool to present your products and services. It is a means to narrate stories, which generates something in the audience, generates emotions and pushes to action. The advertising message can therefore be a memorable moment, in the sense of indelible, in a consumer's life. Creating experiences entails developing interactions with brands that are engaging, relevant, and enriching. In this situation, advertising serves as a link between the customer and the brand's values, dreams, and stories in addition to the product itself. The consumer and the brand develop an emotional connection because of these interactions, and this relationship has the power to significantly impact both short- and long-term loyalty.

Creating a brand's identity through advertising requires meticulous contemplation and planning. Every advertisement, campaign, and message contribute to defining the public's perception of the brand. A brand's identity is a complex mixture of associations, attitudes, and experiences that build up through time, and it goes beyond just its logo or tagline. As a result, since every advertisement shapes this shared perception, it needs to be genuine, consistent, and in line with the company's goals and values. Furthermore, reputation and brand awareness are intangible assets with immeasurable worth. Advertising messaging that is genuine and relevant enhances a brand's reputation, while repetition and consistency help consumers recognize a brand.

Advertising is also characterized by a remarkable ability to adapt and innovate that has allowed it over time to revolutionize and adapt to new trends and changes in consumer tastes and behaviors, as well as technological innovation. Over time, consumers' exposure to advertising messages has increased exponentially and today advertising must not only promote, but also create interaction and bonding. The communication choices that a brand decides to make can shape the image it will have for consumers. It plays a key role in the positioning of brands and allows them to consolidate in the social and cultural fabric of customers.

#### 1.5.2 Emotional Advertising

Emotional advertising is defined as the branch of advertising that leverages emotions, placing a focus on them and using them as a picklock.

We often wonder why people rely on one brand rather than another and therefore establish relationships with the brands they decide to buy. Several studies claim that the answer is to be found in our subconscious (Mahoney, 2003). Emotions are often the ones that guide us in the buying process and are the main triggers of this action. Precisely for this reason, emotional advertising and emotional branding acquire a key role in the communication of brands. Emotions are a fundamental part of many purchase funnels.

To put it simply, marketing is very similar to human relationships. Countless people meet in life but not all of them will become our friends, only a few will enter our most intimate sphere. This is because those people understand us, share our thoughts, or stimulate us to improve. The same goes for advertisements or brands. Today we are exposed to a large number of advertisements, but we remember only a few of the ones we see or hear. The emotional sphere plays a fundamental role in this. In fact, a product or service can have excellent performance, excellent functionality, or an extraordinary design, but if it is not accompanied by a promotional branding strategy that enhances its positive characteristics through an emotional lever, it will hardly remain imprinted in the minds of prospects. This also allows you to further differentiate yourself from competitors. In the long run, a communication that generates a relationship of trust with its consumers leads to a superior competitive offer.

Today, an individual's customer journey has changed, it is no longer linear or cascading as in the past, with a beginning that can be identified in the search for attention that then continues linearly towards the purchase. Today, the phases are more complex and articulated, also accompanied by emotions (Kietzmann et al, 2018).

Figure 1.4: Customer Journey model



(source:https://marketing-espresso.com/emotional-branding-le-emozioni-come-chiave-di-successo/)

Impulsive buying, done on the spur of the moment, is obviously driven by emotions. The preferences of one brand over another is also partly driven by emotions. When we choose a product or service, we often carry out an analysis of factors such as functional aspects and emotional factors conveyed through communication. Precisely because of this important role of emotions, in recent years there has been a multiplication of attention to a new type of approach, neuromarketing.

The paradigm behind it changes in emotional advertising. The key, the focus, is no longer the "what", but what is behind it. The contemporary market, for many of the products on the market, takes quality and efficiency for granted. It wants and seeks something more, it wants empathy. The customer is looking for an experience to live, he wants to feel part of the process and the brand.

When planning your value offering, emotions must have an important relevance. If at first glance they may not seem like an asset capable of offering an economic or business return, in the long run they lead to superior benefits and advantages.

Emotional advertising allows you to tell a story. They have a very high level of efficiency; they can act as a pass to ensure that customers build loyalty to our brand. Multimedia storytelling, although difficult to achieve, is essential nowadays to obtain strategic advantages (Vannelli, 2020). It allows you to communicate values and share your strengths at the same time. In addition, through emotional advertising, the focus is placed on the consumer. It is not the product but the consumer that is at the center of the discourse. Consumers don't buy the product; they buy the experience. To make this switch, placing the customer at the center, it is necessary to understand the needs, desires but also fears of the target consumers. This is precisely why personal buyers are fundamental in modern marketing. From them you can start to set up the contents in order to customize and adapt them. An

important starting point for emotional marketing is Schmitt's model of experiential marketing (Schmitt, 1999). According to this framework, marketing is a process that involves:

- All the senses: i.e. taste, smell, touch, hearing and sight;
- Feelings and emotions;
- The intellectual and problem-solving skills of the subject;
- Physicality, lifestyles and interactions;
- Interactions and relationships with others.

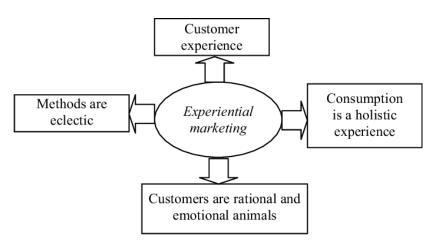


Figure 1.5: Schmitt Model for Esperiential Marketing

(source: Srivastava, R. (2008). How experiential marketing can be used to build brands - A case study of two specialty stores.

Innovative Marketing. 4. 70-76.)

#### 1.5.3 AI impacting Advertising

In the context of advertising, as well as marketing in general, we have seen how AI has introduced a revolution, through technologies that allow a better connection with the customer.

Artificial intelligence enables significantly better personalization and advertising targeting than conventional techniques by analyzing large volumes of data to identify patterns and trends linked to customer emotions and preferences, especially if we refine marketers capable of grasping the potential of these technologies to these techniques.

We have seen previously how AI is able to interpret feedback, reviews and online interactions through techniques such as machine learning or natural language processing (NLP) to understand consumers' emotional reactions (Kauar and Sharma, 2021). Through training based on an innumerable data set, these algorithms are able to recognize nuances and patterns in the language used by users that are attributable to emotions. For instance, they are able to differentiate between a resoundingly positive

comment and a straightforward affirmation, enabling segmentation based on both the declared preferences and the underlying emotions (Monteith et al, 2022). Marketers now have the ability to personalize ads to a degree never possible thanks to this discernment. A brand can develop advertising messages that conjure pleasant memories or happier times if it recognizes that a particular demographic has a strong sense of nostalgia. This will resonate emotionally with the audience and increase engagement. Similarly, advertisements can be inclined toward messaging that highlight novel experiences or discoveries if the data indicates a propensity toward excitement or anticipation. In addition to personalizing content, AI allows you to personalize delivery times and channels, ensuring that messages are not only emotionally aligned with your audience but are also delivered at the most suitable time and context to elicit a response. For instance, in order to maximize the impact of a certain commercial campaign, an AI system may suggest starting it during a noteworthy event, when the target population is most emotionally responsive. Also important is the impact that can be obtained on creativity through the help of the various technologies that AI allows to use, as mentioned above.

Through AI, it is then possible to optimize the developed campaigns, for example by setting up real-time A/B tests that can be carried out on a large scale, through which the various elements of advertising can be analyzed, to understand which ones generate greater audience engagement and greater emotional resonance. By using this real-time analysis, AI can understand whether elements of advertising generate greater emotional response in a specific demographic. This will cause the allocation of resources to be directed more towards that most responsive target group.

AI is also capable of tracking campaign performance simultaneously across numerous channels, giving advertisers a comprehensive picture of how their advertising is affecting digital, social media, television, and other media. This enables marketers to have a thorough grasp of how distinct target segments engage with the campaign through a variety of channels and modify their approach accordingly.

AI not only makes campaign planning and personalization easier, but it also offers sophisticated methods for assessing the emotional impact of advertising. By examining measures like dwell time, interaction frequency, and conversions, advertisers can evaluate not just the breadth of their audience's involvement, but also its depth.

## 1.6 Conclusion and next step

To sum up, we looked at the fundamental relationship between artificial intelligence (AI) and advertising and showed how AI is changing the face of contemporary advertising. We talked about how important AI is to data analysis and audience understanding, which helps brands make more emotionally charged and tailored advertising campaigns. We have also emphasized the ways in which artificial intelligence (AI) helps with campaign optimization, effectiveness analysis, and the production of dynamic and captivating advertising material.

We will go more into the topic of artificial intelligence (AI) in advertising in the upcoming chapter, with particular attention on how this technology affects the planning and creative process of advertising campaigns, particularly with regard to branding and emotional advertising. We'll look into how artificial intelligence (AI) not only makes advertising campaigns more effective and personalized, but also—and perhaps more importantly—how it revolutionizes the creative process by giving marketers cutting-edge tools to develop and execute deeply impactful advertising campaigns. We will be able to better comprehend how AI can influence advertising in the future thanks to this investigation, which will open up new possibilities for a constantly changing sector.

# The Framework of AI in Emotional Advertising

In the previous chapter, we examined the expanding use of artificial intelligence (AI) in marketing and how it is revolutionizing contemporary advertising strategies. We talked about how AI is revolutionizing the marketing sector by delivering previously unthinkable levels of efficiency and personalization through the use of enormous databases and complex algorithms. We specifically discussed how artificial intelligence (hereafter, AI) might increase customer involvement by generating strong emotions in relation to emotional advertising.

The purpose of this chapter is to delve deeper into these insights by examining the theoretical underpinnings of AI's role in emotional resonance in advertising. The objective is to comprehend how emotional resonance has historically been attained through trial-and-error strategies and an intuitive awareness of consumer behavior. Emotional resonance seeks to establish a deep connection with the audience by provoking feelings that drive engagement and brand loyalty. AI, on the other hand, signals a paradigm shift by providing data-driven insights that can improve and elevate the emotional impact of advertising campaigns.

The aim of this chapter is to provide an analysis of what are the components of emotional advertising and how AI interacts with advertising and its ability to leverage the most "irrational" component. This is to make an examination of what is AI in advertising and to reach the theme that we want to analyze in the following chapters, that is, how this type of technologies, with the characteristics and problems that it brings with it and that we will see, impacts the creative process.

# 2.1 Theoretical Basis: AI and Emotional Resonance in Advertising

In the previous chapter, we looked at the growing application of AI in marketing and how it's revolutionizing modern advertising techniques. Our research showed how AI is changing the marketing industry by utilizing large datasets and sophisticated algorithms to provide previously unheard-of levels of efficiency and customization.

In particular, we discussed the idea of emotional advertising and how AI could improve consumer involvement by evoking strong emotions.

This chapter seeks to expand on this framework by delving more into the theoretical foundations of AI's function in emotional resonance in advertising. An essential component of successful advertising is emotional resonance, which aims to create a deep connection with the audience by arousing feelings that encourage engagement and brand loyalty. It transcends simple consumer attention or awareness.

In the old advertising paradigm, achieving this kind of resonance frequently depended on trial-anderror tactics and an intuitive grasp of customer behavior. AI, on the other hand, offers data-driven insights that can improve and elevate the emotional effect of advertising efforts, signaling a paradigm shift in the making.

Here, we aim to explore the methods by which artificial intelligence improves emotional resonance in advertising. We'll look at how AI can predict customer behavior, detect emotional triggers, and create customized advertising to elicit particular emotional responses by analyzing and interpreting massive amounts of consumer data.

By doing this, we expand on the ideas presented in Chapter 1, where we talked about AI's place in marketing strategy and its early attempts at producing emotionally charged ads. By expanding on this conversation, we hope to give readers a thorough grasp of how data-driven AI techniques are transforming the production and distribution of emotionally charged advertising content. This will pave the way for a more in-depth look at AI's creative and ethical aspects in the sections that follow.

## 2.1.1 Understanding Emotional Resonance in Advertising

In the context of marketing, the concept of emotional resonance is crucial. Specifically, it plays a key role when analyzing how consumers interact with brands, their communication campaigns and the messages conveyed through them.

When we talk about emotional connection, we don't just mean trying to get any kind of response but touching the right chords of the audience. It is necessary to ensure that the emotional stimulus is in line with the message you want to convey and with the value or values shared by the company, so that this influences the behavior and perception of customers.

A significant area of marketing study is the complex relationship between emotional resonance and advertising efficacy, which highlights how many emotional cues, such as happiness, sorrow, fear, and anger, can greatly impact consumer reactions to advertising messages. Several existing research analyze this type of connection, in various areas, such as parenting advertising as in the case of the article written by Deng Ting and colleagues, which highlights how advertisements that appeal to emotions allow to improve learning and behavior of parents. it is also explained how emotional resonance allows you to generate a happier family environment (Deng Ting et al, 2024). These studies show how different types of emotions embedded in advertising allow for different types of consumer responses.

Advertisements that incorporate emotions that are considered basic, such as love, happiness and sadness, usually generate similar reactions in the audience as those that embrace social emotions such as humor, human warmth or surprise (Huang, 1998). For example, sadness in advertisements generates empathetic reactions in consumers who observe or listen (Sergierie et al, 2007; Kang et al, 2022). An advertisement that features subjects with sad faces or designs that evoke emotions of sadness has a greater empathetic response. An example of this is the advertisement of charitable associations. Despite this, using the feeling of sadness to generate empathy is not always synonymous with advantage. Although the feeling of empathy is a strong response, the risk in these cases is to induce observers to reflect on the possibility of manipulative use, which could lead to a negative reaction or indifference.

Another emotion that can generate response in consumers who observe advertisements is fear. Fear can be expressed in a variety of ways in advertising. Fear can make consumers' impressions deeper, making recall and recognition capabilities more powerful (Yang et al, 2007). But clearly the use of the fear must be moderated and adapted to the end to be achieved in order for it to be effective. This is further supported by the research (Mostafa, 2020), which claims that ads with low or high levels of fear will have little effect on persuasion because viewers will typically choose to use the advertisement's defense or solution rather than fall for its menacing message. Another example of the use of fear in communication can be found in the works of De Pelsmacker and colleagues. A fundamental aspect is the co-engagement of the message, this is a crucial mediator for the effectiveness of the appeals of fear. Fear appeals are a persuasive strategy, which is used in marketing campaigns to influence people's behavior, who will act in response to a stimulus of fear or a threat of negative consequence. In essence, the appeals of fear must therefore involve the public, so that the perception of gravity and therefore of the effectiveness of the solutions that are proposed is amplified, increasing the persuasiveness of the appeal (De Pelsmacker et al. 2009).

So, it is necessary to understand how the use of emotional resonance in advertising does not operate in a vacuum. The context that is presented and the message that the brand wants to convey the perception of the emotions chosen, influencing how they will internalize it.

The role of happiness should not be underestimated. Advertisements that refer to happy and fun themes can help in making the consumer associate a positive feeling with the brand, thus generating a better brand image, greater loyalty and therefore a greater propensity to buy. The key is always in how you communicate with consumers. It is also necessary to understand not only the spectrum of emotions, but also the cultural and demographic differences that can largely influence the emotional

resonance in advertising. Advertising methods that are culturally sensitive and customized are crucial since what appeals to one group emotionally could not have the same effect on another.

The intricate and multifaceted realm of cultural and demographic influences on emotional resonance in advertising need further investigation. The integration of local cultures allows you to interact better with consumers, also creating a better perception of the brand. When we talk about culture, we cannot fail to refer to Hofstede. His theory of cultural dimensions offers a framework for understanding how cultural variations affect audience behavior and preferences, including response to advertising campaigns. Hofstede identified six key cultural dimensions: distance from power, individualism vs. collectivism, masculinity vs. femininity, avoidance of uncertainty, long-term vs. short-term orientation, and indulgence vs. control. Distance from power measures the acceptance of power inequalities within a society. Advertisements that highlight tradition and authority work better in societies where people are quite removed from the center, like China. On the other hand, ads that highlight equality and cooperation are more effective in societies where there is a low distance from authority, like Sweden (Hofstede, 2001). Individualism vs. collectivism describes whether people perceive themselves as independent individuals or members of a cohesive group. In individualistic cultures, such as the United States, advertisements that emphasize autonomy and personal benefits tend to be more persuasive. In collectivist cultures, such as Japan, ads emphasizing group harmony and collective benefits are more relevant (Hofstede et al., 2010). Masculinity vs. femininity reflects the distribution of emotional roles between genders. Marketing that emphasize ambition and accomplishment is very effective in macho societies like Germany. Advertising emphasizing human relationships and quality of life resonates better in women's cultures, like the Netherlands (Hofstede, 2001; Schwartz, 1994). Uncertainty avoidance measures the degree of tolerance for uncertainty and ambiguity. In cultures where ambiguity is avoided, such as Greece, advertisements that provide security and thorough information are more effective. In societies with low uncertainty avoidance, such as Denmark, advertisements supporting innovation and change are more valued (Hofstede et al., 2010; Trompenaars & Hampden-Turner, 2011). Long-term vs. short-term orientation is about the time orientation of the company. Commercials that highlight tenacity and future investment work better in cultures that prioritize the long term, like China. Advertisements that highlight quick pleasure are more likely to be successful in societies that value short-term satisfaction, like the US (Hofstede, 2001; de Mooij, 2010). Indulgence vs. control measures the degree of gratification of immediate desires. In forgiving cultures, such as Sweden, advertisements that promote freedom and enjoyment of life are more effective. In controlling cultures, such as Russia, ads that emphasize discipline and restraint resonate best.

Further, it is crucial to recognize that the way people react emotionally to advertising varies widely and is influenced by a wide range of factors such as personal experiences, cultural background, and society conventions. An emotion, for example, such as joy, can be expressed and perceived differently depending on the cultural background of the subject exposed to the campaign. It is not said that what evokes joy in a cultural context provokes the same reaction in another context.

The cultural context acts as a lens for the interpretation of norms and values and thus determines a unique interpretation and perception of emotions. When developing their advertising strategy, marketers must take a detailed approach that goes beyond a cursory comprehension of emotions.

The values, values, and traditions, as well as the behaviors, of a target must be studied in detail to ensure that the emotional resonance of advertising is more effective and produces greater resonance. Demographic characteristics should not be forgotten. Factors such as age, gender, or socioeconomic status affect the perception and reaction to emotional components of advertisements. While older audiences may react better to traditional cues and nostalgic components, younger viewers may connect more with references to contemporary culture and modern emotional displays.

Considering this landscape, the integration of artificial intelligence would allow for greater personalization. AI's data-driven insights can assist marketers in more accurately understanding and forecasting the emotional reactions of consumers, enabling the creation of ads that not only grab attention but also emotionally connect with viewers on a deeper level.

#### 2.1.2 Emotional AI: Enhancing Emotional Resonance

We have therefore seen how emotions, such as fear, joy, fun, define the basis of what structures and attracts our attention (McStay, 2018). Data on human emotions are now collected through a number of devices along various aspects of everyday life. An interesting example is constituted by the Animoji introduced by Apple. Animojis consist of 3D emojis that can be customized by users, with different aspects from animals to aliens, passing through avatars of ourselves, to which we can attribute facial expressions. Animojis can be animated live through True Depth technology and Face ID, through which up to 50 facial muscle movements can be recorded (Tillman, 2021).

In this scenario, companies are operating a technological revolution to make AI more applicable to the various contexts in which emotionality is a factor, making use of what is already called emotional AI. Giving a universal emotional AI definition is complex, especially due to its multidisciplinary nature.

Emotional AI, then, is defined as AI systems that can access and interpret emotional data (Gremsl et al, 2022). These systems use various inputs such as facial expressions, tones of voice, text, body movements, and physiological cues to recognize and analyze human emotions. Nowadays all the big players on the market in the various sectors work to make their products more "empathetic" through various tools.

The most classic examples are the aforementioned Apple, Microsoft, IBM or Google. If the companies mentioned all belong to the same sector, the applications can be the most disparate. Think, for example, of the possibility of securing judges through the possibility of analyzing the emotions of those behind the wheel, making conversations with call centers easier through the analysis of voice and tone analytics. All of these uses can be valid for care, dating, mental health, among other industries. Precisely for this reason, human emotions are increasingly analyzed and transformed into data and information that can be fed to machines (Somers, 2019). It is therefore possible through computational techniques and AI algorithms to apply emotional AI to various types of data inputs, such as facial expressions, biometric data, semantics, speech and much more (Dai et al, 2015). The goal is to enable machines to respond effectively and appropriately to human emotions.

Therefore, while the classic AI integrated in marketing leverages algorithms to cover forecasts, such as purchase forecasts or optimize positioning and seeding based on the analysis of historical data, emotional AI goes a step further.—It means being able to understand the reactions and responses of consumers and the marketing stimuli to which they are subjected (Unite.AI, 2019).

For example, while classic AI modifies personal content based on click patterns or what may be a user's purchase history, emotional AI adapts interactions and personalizations based on emotional inputs, i.e. the user's mood or emotional state. In this way, it will adjust the answers or suggestions in real time, adapting them to the emotional context (Analytics Insights, 2023).

Speaking of customer engagement, emotional AI could automate the responses to be provided to customers in various scenarios, in a static way. On the contrary, emotional AI, through tone of voice analysis or text and semantic analysis, can adapt responses, trying to interact more empathetically and appropriately with customers (Kaur and Sharma, 2021).

Furthermore, Emotional AI is highly proficient in sentiment analysis, surpassing basic positive or negative classifications to comprehend the subtleties of mood and feeling. With the use of this feature,

marketers may more accurately gauge the emotional impact of their campaigns, content, or brand sentiments.

Emotional AI in marketing can therefore be applied in different ways, with different impacts, as we have seen. These activities lead to a better brand experience, as well as more optimized engagement and conversion rates (Somers, 2019; Unite.AI, 2024).

## 2.1.3 Mechanism of Emotional AI

Now that we've introduced emotion AI specifically, let's look at some of its peculiarities and how it can be useful, let's see how it works and what technologies allow you to identify, analyze and generate more emotional responses to improve advertising content.

The first fundamental step in the process of emotional resonance driven by artificial intelligence is the identification of emotions. This step is carried out through the use of advanced machine learning algorithms, which allow the analysis of data from different sources. Videos, texts, speeches, social media interactions but also physiological reactions can be used as input in this step. The algorithms are programmed to be able to identify patterns that can be traced back to specific emotional states, which are based on huge sample datasets.

Machine learning and deep learning are crucial. These allow AI to learn from the data that is available. Automatic learning algorithms learn to identify, through the analysis of databases of enormous size, characteristics of the data related to specific emotions and then to trace them back to certain emotional states. Using this knowledge, they are able to predict emotions in new data sets.

In parallel to these technologies, another plays an important role. We are talking about *Natural Language Processing*, hereafter *NLP*, used to analyze the language used in texts. Through NLP, it is possible to intuit the emotional tone in the texts, to allow a deeper understanding of the reactions of consumers.

One of the most well-known and widely used NLP applications is *Sentiment analysis*. While NLP has more varied and general objectives, sentiment analysis is applied to find out how people feel about a given topic. A classic example of using sentiment analysis is the analysis of comments and posts on social media such as *X* or Instagram (Chatterjee et al, 2019). Often in these contexts the main problem is new forms of language such as emojis and GIF, which are often first "translated" into textual or similar language so that they can be interpreted.

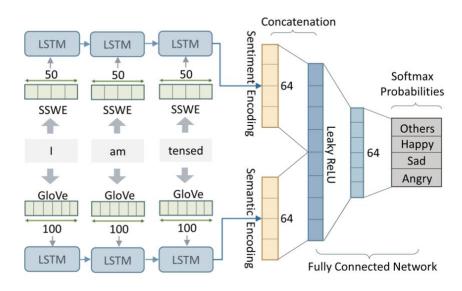


Figure 2.1: The architecture of Sentiment and Semantic Based Emotion Detector Model

(source: Chatterjee, A., Gupta, U., Chinnakotla, M. K., Srikanth, R., Galley, M., & Agrawal, P. (2019). Understanding emotions in text using deep learning and big data. Computers in Human Behavior, 93, 309-317)

Through these technologies, it is possible to have a better understanding of the emotions and preferences of the audience. Thanks to this wealth of knowledge, AI proceeds with the personalization and creation of advertising content, providing insights to personalize advertising messages to evoke specific emotions in consumers. Artificial Intelligence has the capability to produce material that highlights emotional components, such as delight or surprise, if the analysis indicates that these are particularly effective at engaging an audience.

An example of a famous advertising campaign that used AI to improve emotional engagement is the famous "Share a Coke" promotional campaign by Coca-Cola in 2014. Through the use of AI algorithms, Coca-Cola analyzed the data collected by social media to customize the labels of its bottles, inserting the most popular ones. The result has been a much greater involvement of consumers. These were driven to seek the bottle with their name printed on it. Not only have sales declined positively, but so has the memory of the brand. Coca-Cola has also recently worked to develop a limited edition of the historic drink, completely made through the collaboration between AI and human intelligence. The product was named "Coca-Cola Y3000" and was made by analyzing consumer data about tastes and preferences, to understand how they imagine the flavor will be in the future (Beverfood, 2023).



Figure 2.2: Coca-Cola Y3000 Advertising.

(source: https://www.beverfood.com/coca-cola-l-intelligenza-artificiale-creare-soda-y3000-wd/)

Another very famous example is Spotify's use of AI to analyze users' listening patterns in order to create personalized playlists that resonate emotionally with the listener. This allows Spotify to increase user interest, but also to improve brand loyalty.

Recently, the well-known music streaming platform has made available in beta for some users in the United Kingdom and Australia the ability to generate entire playlists from scratch via AI (Crescenzi, 2024). All you need to do is give a simple text prompt. Similar to art creation platforms like DALL-E, AI will generate a playlist. For example, we can ask for a playlist for the moments when we want to relax. To get the best results, it is also advisable in these cases to study prompts that are as comprehensive as possible.



Figure 2.3: Frame of the Spotify advertising launched to announce AI playlists

(source: https://www.wired.it/article/playlist-spotify-personalizzate-ai/)

In the next paragraph, we will look in detail at another area of AI that is important in advertising along with the emotional component, namely creativity.

# 2.2 The Impact of AI on Advertising Creativity and Production

Technological evolution has transformed the advertising landscape, with AI carving out an increasingly important place in the creative and production process. Innovation has not only brought about a change in the way marketers work, but it has also enabled a paradigm shift from a traditional approach, which relied solely and exclusively on intuition and experience, to a hybrid approach, driven by complex technologies that open up new ways of expressing themselves.

Through AI and its ability to analyze data and learn by redesigning the creative processes and distribution of advertising content. Machines can be used to generate creative ideas, optimize advertising messages, and personalize the way brands communicate with their customers. All this is reduced to a new way of advertising, more targeted and dynamic, more responsive to the reactions of the public.

We will examine in this chapter the possibilities as well as the challenges that artificial intelligence presents as we examine how AI is affecting advertising creativity and production.

#### 2.2.1 AI and Creativity in Advertising

In the field of creativity, the evolution of creative artificial intelligence platforms has redefined the boundaries of digital content production. Thanks to platforms such as *DALL-E* or *Midjourney* and their ability to interpret and create complex and elaborate works from simple inputs (De Cremer et al, 2023), these platforms have opened up a new way of approaching creativity.

These technologies extend beyond the simple name of imaging tools, they are changing the role of the designer as we have understood it until now.

But the output produced today depends a lot on the prompt that is given by the user (Van Dis et al, 2023). In today's landscape, new job roles such as "prompt engineer" or tasks such as prompt engineering are increasingly common and belong to the new work vocabulary.

These platforms are not only able to replicate existing art styles, but also manage to combine them in an innovative way. This allows creators and users to push themselves to new frontiers of creativity. A classic example can be the DALL-E platform, which can create images by mixing concepts that are poles apart from each other, such as plants in the shape of furniture.



Figure 2.4: Image of a cactus in a shape of a desk created with DALL-E

(source: Author's elaboration)

But in addition to having to formulate prompts that are effective, in order to obtain valid images, it is necessary to contemplate the post-creation work. AI-generated content often falls short in accuracy and precision. theses, for example, are often affected by the so-called "hallucination effect", that is,

the texts are written in a way that is credible, but the information is incorrect (Shen et al, 2023), or the generated images have visible flaws, such as deformed human limbs (Bhaimiya, 2023).

These "weaknesses" in the use of these technologies must therefore be considered.

Another important and significant aspect is the democratization of access to creative tools. Having made tools such as Midjourney available has allowed those who do not possess the technical skills typical of graphic designers to create complex and often professional-looking visualizations. This has eroded some of the barriers to entry in the industry, paving the way for new artists, allowing a multitude of subjects to express themselves artificially. This allows the proliferation of new job figures, enticed to explore, and experiment. This stimulates innovation as well as progress in the field of arts and consequently advertising.

One of the phases of the creative process that has been most impacted by AI is the problem definition and brief creation phase (AdCreative, 2023). This is the phase in which the challenges are identified and the scope of the project to be developed is defined. AI can make this phase extremely abrupt, analyzing data and identifying patterns to understand the challenges ahead. Of course, AI can also help in the generation of potential solutions, proposing ideas that serve as a point for marketers. However, AI is a tool that the designer uses and interprets through his or her own creativity.

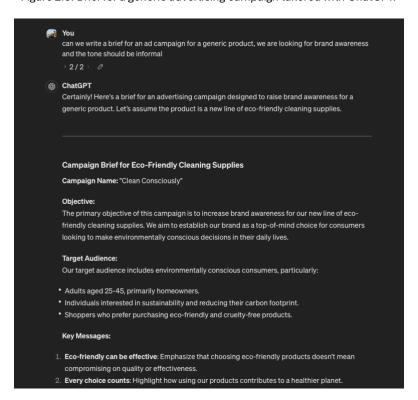


Figure 2.5: Brief for a generic advertising campaign tailored with ChatGPT.

(source: Author's elaboration)

The flipside of the coin is clearly the risk of overcrowding in the market, where the increase in content products, often similar in style, can make it difficult for new creators of valid content to emerge. In addition, the possibility of large-scale access could make quality more diluted, often allowing quantity to prevail.

The adoption of these technologies also entails a number of ethical challenges, which we will discuss in more detail later in the chapter. The concept of intellectual property is certainly one of the most debated, as is the risk that ease of access discourages the learning of the specific skills required by traditional graphic designers.

In the years to come, artificial intelligence will likely be more skillfully incorporated into the creative process; algorithms will be able to learn from the aesthetic preferences of its users with the goal to further customize the final product. This begs the intriguing question of what creativity will mean in the age of artificial intelligence.

## 2.2.2 Implication of the AI advent on Creative Roles

AI is revolutionizing the creation, customization, and distribution of content in the advertising industry, ushering in a new era of cooperation between cutting-edge technologies and human creatives.

Marketers, creatives, and graphic designers are learning how to harness the potential that AI has to offer to improve creative strategy and its execution. Through the tools that AI provides, it is possible to generate ideas, optimize advertising messages, even predict how audiences will react to advertising stimuli.

AI has therefore quickly become a very popular tool in the creative sector as well, for the reasons seen above. AI and the ability to automate routine activities allow artists and professionals in the sector to focus on the most complex aspects of their work, allowing a better allocation not only of economic resources but also of energy in terms of the effort involved.

For example, through the use of AI, the creative can generate an idea in less time and work on the details of it to outline the final product, reducing the time and costs associated with the traditional design process. Or AI can help to refine existing content, identifying areas for improvement through the use of photos and videos, sometimes even acting autonomously to adjust some elements. For example, quest has a strong impact on all those advertising campaigns that are based on photos and videos, where AI has become a support tool for improving image quality. New entrants must therefore

be able to integrate their characteristics with the capabilities of AI, to avoid being supplanted but rather, become even more efficient in an era of transition and innovation.

Of course, all that glitters is not gold. There is an opposing faction that praises AI as the new fashion, arguing that it can limit creative freedom rather than enrich it. To counter this misconception, it's important to comprehend how AI can enhance creative abilities rather than take the place of the human touch.

There are numerous possibilities for creativity in advertising, despite the difficulties. AI can provide a more thorough insight of consumer behavior than is feasible with conventional market research. This kind of information can shed light on the unconscious motives and aspirations of consumers, allowing creatives to develop advertisements which speak to the emotions and intellect of their target market.

The incorporation of technologies such as AI is always a challenge, even more so in a very particular sector such as advertising and creativity, which leverages many of the peculiar characteristics that distinguish us from machines. When approached with the right mindset and proactively, these opportunities can push the advertising industry to new frontiers. It will be essential to find the right balance between what is the human element and what will be achieved by machines.

#### 2.2.3 Balance between AI Generated Content and Human Creativity

As can be seen from what has been said so far in the advertising field, the content generated by AI and human capabilities can and must coexist, this is to obtain the best results from advertising campaigns. To ensure that this synergy is optimal, the two components must be perfectly balanced. The right mix allows you to take advantage of the advantages of both approaches, sometimes even to make up for the shortcomings of the other, thus not having to give up something.

On the one hand, we have the pure emotional sensitivity that creatives and marketers possess, together with the understanding of context and sub-context as well as the element that distinguishes par excellence, namely origin. On the other hand, we have the countless capabilities that AI possesses, such as the ability to analyze large amounts of data, the identification of trends and patterns, the identification of typical behaviors and consumer preferences, all enclosed in a general ability to provide valuable insights throughout the production process that can also shape but also inspire marketers.

If it is true that AI allows advanced personalization in advertising, it is also true that this is done in respect of privacy and autonomy. AI platforms need to be programmed and directed to use data

responsibly so that this use does not turn from personalization to manipulation (Gremsl and Hödl, 2022). The role of the human component is crucial in placing constraints and limits on what AI can and should do. To preserve an ethical balance, consumers must have control over their information and there must be transparency about how it is utilized. This issue will be the subject of further study later.

AI can allow marketers to test their ideas during the development phase of the campaign. Through artificial intelligence it is possible to test the different variants of the campaign, alternating the various creative and non-creative components, allowing an optimization through the feedback and insights produced. This has a drastic impact on audience results and advertising ROI.

Therefore, there is a need for greater collaboration between AI specialists and creative teams in the development of strategies and campaigns. It is no coincidence that new workers are often trained in both fields. However, further expenditure should be made on the training of marketing professionals on the subject of artificial intelligence. The cohesion of the two worlds is an increasingly cunning reality that must be grasped in order not to be outclassed.

In the following paragraph we will have a more in-depth analysis of the ethical issue related to the use of AI in advertising campaigns.

# 2.3 Ethical Implications of AI in Advertising

We have seen so far, the capabilities and possibilities that artificial intelligence opens up and its adoption in marketing and advertising specifically. New technologies make it possible to improve the accuracy of promotional campaigns, push creative boundaries beyond the current ones and allow experimentation in order to improve the final result. However, AI also brings with it a dark side. The adoption of such technologies with such vast potential raises vital ethical questions.

The integration of AI into the advertising creative process involves important issues related to privacy, emotional manipulation, but also related to intellectual property. Its use cannot be without the implications it would have on all these aspects. In addition, we must not forget the growing fear of many of the workforce and beyond, that is, the possibility that AI over time could replace the human element, its creativity, reducing advertising to an automated process, devoid of the human spark.

Examining how AI is altering the job of creatives in the advertising sector is crucial because it's not just making content creation easier, but it's also reshaping the idea of what it means to be a content producer in the digital era.

#### 2.3.1 Personalization vs. Intrusion

The introduction of AI into creative processes has, as we have seen, revolutionized the interaction between companies and consumers, making personalization not more a part of the strategy, but an important component.

Companies using deep learning and machine learning are also often able to anticipate consumers' desires, which often leads to the question of whether they are discovered or induced desires.

However, the resulting personalization is incredibly effective and able to generate greater engagement, which often results in greater customer satisfaction.

Through the use of advanced algorithms, AI is able to analyze a consumer's past behavior, analyzing their purchases and expressed preferences. Through this it is possible to personalize your content in a very deep way, precisely in line with the interests of the consumer. An example is Google or Facebook. The two tech giants leverage behavioral data to show ads that are targeted, based on historical online user data analyzed (Parlangeli, 2018).

However, this depth of personalization can often be perceived as invasive (BenMark et al, 2019; Zucchiati, 2023). Users often feel "surveilled" or "spied on" when they see and come across online ads for products and services that they have researched or talked about. This perception on the part of consumers can cause personalization of the service rendered to users to become a concern for their privacy. The risk can therefore be to make users think that they are being monitored in their daily online activities (Querci et al, 2024). It is therefore necessary to be able to balance, also in the frequency of appearance of the ads, or by giving the possibility to users to be able to choose what to be profiled in and in what not (Elliot and Wood, 2021).

This perception and perception, which contrasts with all the merits and advantages that AI and data analysis, generates an ethical debate that takes place in the question of whether or not it is appropriate for companies to make use of personal data for the purpose of carrying out advertising campaigns. As in many cases, opinions are mixed. on the one hand, we have those who appreciate personalization and find it convenient, on the other hand, we have those who are afraid of how their actions can be collected and used, questioning the transparency of the actions taken (Hayden, 2022). For this reason, many companies are implementing or have already implemented different strategies such as: Active transparency, opt-out options and the restriction of data storage to the minimum necessary. In the first case, we are talking about informing consumers about data collection and what uses will be made of the correct data. The second strategy provides the possibility for users to opt out of data collection in a simple and intuitive way, as happens with online cookies. This is certainly one of the challenges of

the modern economy that companies will have to face, and marketing and advertising are not excluded from this discussion.

#### 2.3.2 Emotional Manipulation and Bias

We have seen in the course of the chapter what possibilities emotional AI offers in trying to make the emotionality of advertisements resonate. However, the various advantages and opportunities it creates are only one side of the coin, the other, of course, is the psychological perception that consumers have of the use made of new technologies, in terms of their impact on them. The growing fear is that there is a risk of emotional manipulation of consumers (Ienca, 2023).

Advertisers are able to personalize messages with never-before-seen precision because to artificial intelligence (AI), which is capable of assessing vast volumes of data about how consumers behave. However, the ability to tailor advertisements so proactively can turn into an attempt at emotional manipulation when possible psychological vulnerabilities or emotional triggers are exploited in the development of the campaign.

For example, let's think of a possible situation in which algorithms are used to identify moments of low self-esteem of consumers or a general feeling of mild depression, and thanks to this information users are exposed to advertisements for products and services that meet the problem of self-perception, inducing them to buy impulsively driven by momentary emotions without a weighting process at the base. Can we call it truly ethical? This question is often asked in the field of neuromarketing, which often goes hand in hand with these disciplines.

This ability to influence decisions, manipulating consumers through emotions, raises profound questions.

From a social standpoint, using manipulating emotions in advertising can have detrimental effects on customers' mental health by fostering a culture where people feel under pressure or uneasy all the time (Torres, 2020). In addition, this use of emotions can exacerbate society's innate consumerist tendencies, which could lead to an unsustainable and ethically questionable consumption model.

This approach can also lead to the erosion of the relationship of trust that can exist between brands and consumers (Atleson, 2023). This leads to reputational damage that undermines brand loyalty from consumers and prospects in the long run.

In addition, due to the nature of emotions, which are subjective, emotional AI can run into bias. For example, it is often the case that AI associates certain types of emotions more frequently with specific ethnicities than with others (Rhue, 2019).

The problem is that AI can recognize a smile, but it often doesn't have the ability to pick up on the cultural differences related to that expression. This can lead to incorrect considerations and choices based on incorrect data reading. To mitigate bias and achieve an effective and efficient implementation of emotional AI, it is necessary to combine the different technologies. For example, the solitary use of facial coding, biometrics, and electroencephalograms results in lower levels of accuracy compared to the accuracy obtained from a combined use of the three technologies (Leighton, 2017).

Businesses must take into account the long-term implications of their advertising techniques and make sure that technology is employed in a way that promotes both the welfare of consumers and company objectives.

#### 2.3.3 Privacy and Data Security

Concerns about the security and privacy of personal data have grown as a result of the introduction of artificial intelligence into marketing techniques, which has significantly increased a company's capacity to personalize interactions with customers. One of the main questions that the consumer public is asking is how their data is protected from unauthorized access and use.

It is essential for companies to deploy modern security protocols in order to mitigate these dangers. Encrypting data is therefore a necessity that cannot be avoided. Encrypting data is intended to turn sensitive consumer information into codes that are very difficult for unauthorized users to crack (Paloaltonetworks, 2024).

Another important security measure that companies are adopting is multi-factor authentication. A multi-layered security access management procedure called multi-factor authentication (MFA) requires users to verify their identity with multiple credentials or authentication factors before granting them access to a network, system, or application (Vaideeswaran, 2023). A username, password, and an additional factor—such as a verification code or one-time password (OTP) sent by SMS or email, a security token from an authenticator app, or a biometric identifier—are typically used in conjunction to accomplish this.

Transparency in data collection policies is also critical. Companies must state openly what data their algorithms will collect, and how it will be used. This type of approach oriented towards hopefulness improves the relationship of trust that can be generated with customers (Anant et al, 2020), as well as is fundamental to stay in line with the stringent directives of international regulations such as the General Data Protection Regulation (GDPR).

Building a long-lasting, trustworthy connection with customers, who are becoming more conscious of and worried about the privacy of their personal data, is facilitated by adopting and upholding these high standards, which also enhance security and compliance. In a market where competition is fierce, businesses who truly care about data protection not only stay out of trouble with the law, but they also win over devoted customers.

### 2.3.4 Consumer Autonomy and AI Transparency

Consumer autonomy must be taken into account when using AI in marketing, particularly when it comes to informed permission and campaign transparency.

Not only is it critical that companies understand the purpose of data collection, but also that they obtain explicit consent from consumers before collecting and using data (Burkhardt et al, 2023). It is therefore necessary for companies to inform consumers in order to make them fully aware of the practices applied for the collection and use of data so that they are able to make autonomous and responsible choices regarding their data (Hildt and Laas, 2022).

Hand in hand with consensus, operational transparency also plays a role (Hall, 2023; Felzmann et al, 2019). It is not enough to inform consumers about the ultimate goal of collecting their data, it is also necessary to inform them about how AI will operate with this data. The decision-making logic of the algorithms used was disseminated as far as possible, with the aim of mitigating consumer concerns (EMB, 2024; Yu and Li, 2022). On the other hand, companies aim to gain trust, which can only be achieved when customers perceive companies as entities that operate with integrity in respect of their rights.

Customers are more likely to stick with firms they believe respect their rights and autonomy (Hermawan, 2019). This conduct is evident in both recurring business dealings and favorable word-of-mouth, both of which can strengthen a company's good reputation.

# 2.4 Conclusion: Our Research Question

At the end of the chapter, let's take stock of the work done so far. In this chapter, we've explored in depth the transformative role of AI in honing the emotional resonance of ad campaigns. It focused on how artificial intelligence, by analyzing, processing and finally interpreting other amounts of data about consumer behavior, makes it possible for marketers to anticipate and manage targeted emotional reactions, taking the personalization of advertising campaigns to a higher and advanced level.

The use of AI to refine the emotional resonance allows, as mentioned during the text, to improve both the engagement of its consumers with the brand, but also to create stronger and more lasting bonds and connections with the brand, actively affecting users' loyalty to the brand.

The implications of artificial intelligence on creativity in advertising were also discussed. As discussed, Artificial Intelligence integrates and transforms the traditional creation process, characterized by the means we all know, providing professionals with powerful new tools to take full advantage of highly data-driven insights. The combined use of human creative intuition and algorithmic precision pushes the boundaries of content production beyond today's, outlining new innovative possibilities for the creation of increasingly effective advertising campaigns.

However, as discussed extensively at the end, this technology, as well as the previous ones, brings with it several ethical issues related to its integration. In particular, issues related to the privacy of consumers and prospects and the potential emotional manipulation of consumers emerge. These considerations require careful critical but above all responsible reflection on the part of brands, to guarantee the public audience a use of AI that respects their rights, which has positive implications on the intention to purchase and on the link with their target audience.

This thorough examination has given us the knowledge and resources we need to critically analyze and comprehend the creative process underlying contemporary AI-driven advertising.

This is essential for the continuation of the work, as we will break down the experimental part, also applying what we have seen as knowledge so far, to expose the new approaches to the design of emotional advertising campaigns. The investigation that we want to carry out is deeply linked to the research question that guides this study and all the work from the beginning, namely: "What is the impact of the use of artificial intelligence technologies in advertising that leverage emotion?".

Understanding the answer to this issue will be essential to understanding how AI will influence advertising strategies going forward in markets like *sports marketing or the automotive sector*, where customer involvement is heavily influenced by emotion.

# The study: Semiotic and Content Analysis in Commercials

## 3.1 Introduction to Semiotics in Marketing

Semiotics, a discipline that focuses on signification (meaning making), is essential to the study of marketing because it provides qualitative methods and instruments for examining and comprehending how consumers interpret and process advertising messages. Semiotics extends beyond the decoding of communication content and investigates the cultural codes and symbols that impact the attitudes and actions of consumers. This section provides an overview of the importance of semiotics in marketing, divided into three main sections. First, a definition of semiotics will be given. The significance of semiotics in marketing will next be discussed, emphasizing how this field may help develop and maintain a brand's image by analyzing signs and symbols. Lastly, the basic ideas of semiotics will be examined in relation to advertisements, examining the ways in which signs, textual and visual codes, and the cultural setting interact to produce successful and culturally appropriate advertising messages.

All this is done with the ultimate goal: to provide the theoretical basis for what will follow in the continuation of the chapter.

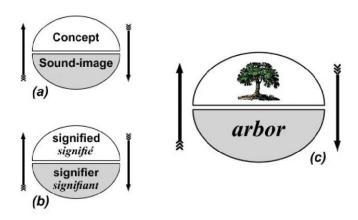
#### 3.1.1 Definition of Semiotics

Semiotics is the discipline that studies signs and sign systems within communication and culture. Originally a medical term for "symptom", it refers to the set of significant transactions within a system of signs, such as a trademark, an advertising copy or a sales environment. Semiotics is distinguished

by its ability to analyze how signs, symbols and narratives are used to create meaning in various forms of communication and how these meanings are interpreted by the recipients.

Semiotics, originally derived from the Greek word "sēmeion," meaning sign, is a discipline that has its roots in the work of pioneers such as Ferdinand de Saussure and Charles Sanders Peirce. Saussure, one of the founders of modern linguistics, introduced the concept of sign as a combination of "signified", related to the content, and "signifier", the way a notion is represented (de Saussure, 1916).

Figure 3.6: Signifier-signified concept



Source: (https://blogs.ubc.ca/rbednar/2016/02/10/significance-of-semiotics-and-sounds/)

This distinction has made it possible to understand how signs can convey complex and profound meanings through the help of arbitrary and cultural associations (Oswald, 2012). The *Signifiant* is the physical form of the sign, i.e. the material aspect that can be perceived by the senses, such as a sound, an image or a written word. The *Signifiè*, on the other hand, is the mental concept associated with the signifier, the content that is evoked in the mind of the person who perceives the sign.

According to Saussure, there is no inherent relationship between the shape of the sign and the idea it conveys because the relationship between signifier and signified is arbitrary. Put another way, rather than being a product of natural necessity, the connection that associates a specific sound, image, or phrase with a particular thought is the outcome of social and cultural traditions. A visual representation of what has just been expressed can be found in Magritte's painting "La trahison des images" which shows a pipe and the phrase "Ceci n'est pas une pipe" which translated means "this is not a pipe".

Figure 3.7: "La trahison des images"



Source: (painting made by René Magritte, 1928-1929)

To be even clearer, consider the example of the word "cane." The sequence of sounds "c-a-n-e" in Italian is used to indicate a four-legged pet that barks. However, there is nothing inherently "canine" about this sequence of sounds; the connection between sounds and the concept of the animal was arbitrarily established by humans in the context of the Italian language. In other languages, such as English, the same animal is called "dog", and in French "chien". These different words all represent the same concept, but use completely different signifiers, demonstrating the fact that the link between signifier and signified is not universal but varies according to the linguistic and cultural conventions of each community (Oswald, 2012).

Another theory that expands on the concepts expressed by Saussure is contained in the studies of Charles Sanders Pierce. Pierce's theory of signs deepens the theory, introducing a classification of signs, divided into three categories:

- *Icons*: signs that use a physical or perceptual similarity to symbolize their object. A clear example is a photograph, which uses a visual similarity to portray a person or object.
- *Indexes*: signs that claim to have a direct and causal relationship with their object. For example, smoke is a sign of fire since it indicates the presence of anything that is burning.
- *Symbols:* signs whose relationship to the item is based on a cultural or social convention. Language words are symbols, because their meaning is defined by agreed language agreements within a society.

In the field of marketing, semiotics becomes a powerful instrument for interpreting advertising messages and understanding the dynamics of building brand value. Signs and symbols are used in marketing and advertising communications to elicit from consumers both cognitive and emotional

associations, which affects perception and purchase behavior. Because semiotics encompasses all facets of culture, its potential applications in consumer research are numerous and always growing. To apply semiotics to marketing, it is necessary to analyze:

- Signs: An entity composed of a signifier and a signified;
- *Codes:* Codes are sign systems that are employed in a society to convey meaning. They consist of behavioral, gestural, and visual codes in addition to spoken language;
- Denotation and connotation: Connotation is the term for the cultural and associative connotations that a sign invokes, whereas denotation is the first level of meaning expressed through a sign.
- Mythology: stories with a strong cultural foundation that express a society's ideals and beliefs.
   Myths are a common tool used by marketers to craft compelling stories about their goods (Oswald, 2012).

#### 3.1.2 Importance of Semiotics in Marketing

Semiotics plays a crucial role in marketing. Through semiotics, it is possible to unveil the cultural codes and systems of meaning that influence consumer behavior. A deep understanding of signs and symbols allows marketers to develop more effective and culturally relevant advertising campaigns. Through the instrument of semiotics, it is possible to make use of an analytical tool to decode advertising campaigns and therefore to be able to understand how meanings are constructed and received.

An important aspect of semiotics is its ability to analyze and manage cultural connotations that can strengthen or damage a brand's image. Through semiotics it is possible to guide the positioning of a brand and the design of a logo, with the intention of creating a coherent communication line that generates a tangible impact (Floch, 2001).

Values, beliefs, myths, and cultural practices are examples of cultural codes that can be examined through semiotics analysis. These codes establish the framework within which consumers understand advertising messages. In a society that prizes status and achievement, for instance, an advertisement showcasing expensive automobiles and jewelry can inspire desires for these things. Conversely, in societies where modesty and humility are valued highly, advertising itself may be viewed as ostentation or superficiality (Oswald, 2012). Through the analysis of these codes, brands can understand how to adapt their messages to make them resonate in the different cultures.

Understanding how customers interpret advertising messages and how these messages affect their perception of the brand is made easier by semiotics. A brand's image is frequently influenced by myths and stories created via the advertising.

An example of this process is the narrative that Apple couples with its products. They are not only the representation of technological innovation, but also of creativity and different thinking (dndcom, 2024).



Figure 3.8: Apple slogan "Think Different"

Source: (https://it.wikipedia.org/wiki/Think\_different)

The value of a brand does not lie only in the product or service produced and offered. Functional characteristics are only one of the components, consumers associate symbolic meanings with brands (Aaker, 1996). A strong brand can evoke a coherent set of emotional and symbolic associations, helping to build a solid brand identity.

Coca-Cola's holiday advertising campaign is a well-known illustration of the use of semiotics in marketing (Oswald, 2012). In order to elicit feelings of happiness and giving, this campaign makes use of traditional Christmas icons like Santa Claus and family gatherings, thereby solidifying the brand's position as a central component of the holiday season. Similarly, because of decades of skillfully planned advertising campaigns and connections with globally recognized athletes, Nike's

iconic "swoosh" emblem symbolizes qualities of performance, creativity, and energy in addition to being a distinctive graphic mark (Medium, 2017).

## 3.2 Research Methodology

The present thesis employed a study approach that aimed to investigate the effects of artificial intelligence (AI) in advertising campaigns, with a particular emphasis on user sentiment. The selection of the commercial sample for analysis, the selection criteria, and a detailed description of the sample are all covered in length in this section. Next, the analysis methodology selected for the selected commercials is discussed.

#### 3.2.1 Textual corpus selection and selection criteria

The corpus of commercials selected for the work is composed of the commercials:

- 1. Make It Real BMW
- 2. Forever is Made Now Under Armour
  - a. The ultimate Talk Under Armour

The selection of the corpus of commercials was carried out with the aim of representing different applications of AI in marketing and to analyze how these applications affect users' emotions and sentiment. The clever use of AI technology in the making of the chosen advertisements and its capacity to arouse powerful emotions were the deciding factors in their selection. The third commercial, more than a settled case study, represents a further analysis of the choice of position taken by Under Armour with respect to the use of AI. However, it presents itself as a different commercial in the realization, as the AI in this case performs the task of developing the copy, while in the first case it is a creative tool for the creation of the images used. Precisely for this reason, it will not be analyzed in the same way as the other two main cases, but an overview of the commercial and an analysis through semiotic methodology will be made to better understand the role of AI.

To effectively answer the research question ("What is the impact of the use of artificial intelligence technologies in advertising that leverage emotion"), it was crucial to select commercials that not only used artificial intelligence technologies but were also able to elicit significant emotional reactions in the audience. The selection criteria adopted focus on three main aspects: the use of AI, the ability to evoke emotions and the variety of contexts.

We will now go into the specifics of each criterion to understand the selection:

- 1. *Use of AI:* The first criterion, and probably the most critical, is the use of artificial intelligence in advertising campaigns. The selection of advertisements that would significantly include AI in their creation or distribution was required in order to suitably respond to the research question. This can involve creating visual material, leveraging AI technology to increase the efficacy and precision of targeting, or personalizing messaging through advanced data analytics. Under Armour's commercials use AI in similar ways and in different ways to produce commercials, using images created through algorithms or copy that are interpreted by real people, in this case others,, whereas the "Make it Real" video uses a virtual influencer developed by AI. These two commercials are ideal for examining the emotional impact of AI.
- 2. *Evoked Emotions:* Because the purpose of the research is to assess user sentiment, it was critical that the chosen commercials were able to elicit strong emotions. As discussed in the preceding chapters, the viewers' attitudes and perceptions are shaped by the intensity and quality of the emotions evoked. The commercials that are part of the corpus, such as the Under Armour one that celebrates the resilience of athletes, are suitable for analyzing how AI can amplify these emotions and how they can then influence the reaction of the audience.
- 3. Variety of Contexts: The choice of commercials from different sectors, specifically automotive and sport, was strategic as it allowed us to study the application of AI in different marketing contexts. For example, BMW's commercial is aimed at a technology- and innovation-oriented audience. Nevertheless, although two different sectors, all three are united by the prerogative to use emotional levers in communication.

The choice of these commercials as a sample is therefore closely related to the research question. This is confirmed by the selection criteria listed. The chosen commercials all present a practical application of AI, used in an innovative and disregarded way, offering a rich field of study to analyze how this technology influences user sentiment. The variety in the use of AI (from content generation to message personalization) allows us to examine the breadth of emotional impact. By examining commercials from different contexts, the research can highlight how AI is effective in different sectors and how the context influences the sentiment generated. This variety provides a more comprehensive understanding of the impact of AI in advertising campaigns. In addition, the difference in the emotions aroused by the various commercials allows you to explore how different AI strategies can affect audiences differently.

### 3.2.2 Corpus Description

The corpus selected and analyzed includes three distinct commercials, each of which represents a different context of use of artificial intelligence (AI) in marketing. A description of the selected spots is provided below.

#### 3.2.2.1 Make It Real

The "Make It Real" commercial created by BMW is a representation of how to use AI in commercials for the automotive sector. The advertising campaign for the new BMW iX2 model was created in collaboration with virtual influencer Lil Miquela, a digital influencer created entirely with the help of artificial intelligence technologies.



Figure 3.9: Make It Real ads

Source: (https://brand-news.it/brand/automotive/auto/bmw-la-creator-virtuale-lil-miquela-nello-spot-per-la-ix2/)

The campaign was developed for the launch of the BMW iX2, an electric vehicle that embodies the brand's commitment to a sustainable and digitalized future. The choice of a figure like Lil Miquela was strategic to represent the central theme of the campaign: the bridge between the digital and real world. This theme is reflected in the narrative of the commercial, in which Lil Miquela, a digital entity, explores human reality, discovering and appreciating the beauty of real life. This advertisement is revolutionary for the extensive exploitation of AI. Despite being a digital construct, Lil Miquela has an astonishingly lifelike appearance because of sophisticated facial substitution and rendering techniques that allow for the capture and replication of real human expressions (Rohtau, 2023; Brandinginasia, 2023).

Figure 3.10: Lil Miquela in a frame of the spot "Make It Real" recreating human expression.



Source: (https://www.brandinginasia.com/bmw-launches-make-it-real-campaign-with-virtual-creator-lil-miquela/)

BMW adopted this tactic to highlight the idea of "Freude Forever", hoping to arouse the wonder and delight that come from realizing the beauty of life, even in an environment that is heavily digitalized. Authentic emotion elicitation and fortifying the emotional connection between the brand and its audience were among the campaign's main goals. The commercial's story, which follows Lil Miquela as she discovers and falls in love with the real world, is meant to make viewers smile and feel awestruck. Selecting a virtual influencer to be the campaign's main character not only gives it a fresh and avant-garde feel, but it also makes it more pertinent for customers who live in a world that is becoming more and more digital.

A distinguishing feature of the commercial is clearly the ability to combine technological innovation with an emotional nature, positioning itself as an example of how AI can be used to create engaging and memorable marketing experiences, capable of arousing a strong reaction in the observer (MarketingInteractive, 2023).

#### 3.2.2.2 Forever is Made Now

Under Armour's "Forever is Made Now" advertisement is an excellent illustration of how artificial intelligence (AI) can be used to generate compelling emotive tales that reinforce brand values and connect deeply with consumers. This ad exists in a setting in which AI is not only a component of technological innovation, but also a means of amplifying the brand's message and personalizing the visual and narrative experience for each viewer.

The Under Armour ad stands out for its use of artificial intelligence to analyze and interpret vast amounts of data about athletes, such as performance statistics, personal histories, and character attributes. AI has enabled the transformation of this data into a highly tailored visual story that honors athletes' mental and emotional resilience, as well as their physical abilities. The AI's ability to tailor the narrative to these individual stories makes each version of the commercial unique, strengthening the bond between the audience and the brand.

The application of AI for content personalization in sports marketing not only increases campaign effectiveness, but also contributes to a more engaging emotional experience for the viewer (Davenport and Ronanki, 2018). In this context, AI acts as a catalyst for creating messages that resonate with viewers, leveraging authentic emotions and pivotal moments in athletes' lives. A peculiar feature of the commercial is clearly the ability to put together and integrate objective data and subjective narration. The help of AI makes it possible to merge quantitative data with narrative elements that accentuate personal stories.

Moreover, AI allows for greater personalization of sports marketing campaigns, where athletes' or teams' stories can be used to create a connection with the audience (Sbrighi, 2024). In fact, through AI it is possible to turn raw data into very powerful stories.



Figure 3.6: Frame from the spot "Forever is Made Now"

Source: (https://marketing4ecommerce.net/la-ultima-campana-de-under-armour-reaviva-el-debate-acerca-del-uso-etico-de-la-ia/)

#### 3.2.2.2 The Ultimate Talk – Under Armour

Under Armour's "The Ultimate Team Talk" commercial is a pioneering example of the use of artificial intelligence (AI) in the marketing industry, especially in sports. Created to inspire and motivate athletes on the eve of major competitions, the commercial uses a combination of AI technologies and

human input to generate the ultimate motivational speech for team sports. The campaign is part of the brand's renewed "Protect This House" initiative, one of its most famous, whose aim is to stimulate a strong sense of team and belonging among athletes, which has always been considered one of the cornerstones of sport.

The creation of the speech is based on the analysis of academic literature in sports psychology and the direct experiences of professional athletes sponsored by Under Armour, such as Trent Alexander-Arnold and Antonio Rüdiger, players of Liverpool and Real Madrid respectively. These players shared anecdotes about motivational speeches that positively influenced their performance, which were analyzed and used to develop the framework behind the commercial. AI technology, powered by ChatGPT, was employed to generate highly refined speech that incorporated motivational elements such as a focus on mental preparation, visualizing victory, and strengthening team cohesion. Finally, the speech is presented with an emphasis on the emotional energy and simplicity of the message, characteristics considered essential for effective communication in sport (Under Armour, 2023; hedgehoglab, 2023).



Figura 3.7: Frame of the spot "The Ultimate Team Talk"

Source: (https://www.youtube.com/watch?v=Vez0yBztLeg)

The campaign stands out for its innovative human-tech approach, i.e. the synergy between human creativity and the analytical capabilities of AI. British actor Ashley Walters was chosen to voice the discourse, resulting as a visual protagonist, helping to convey the authenticity and passion necessary for an emotional impact on the listener. The motivation behind the creation of this commercial is

therefore twofold: on the one hand, to demonstrate how AI can support the development of motivational tools in the sports context; on the other hand, to strengthen Under Armour's brand identity as a leader in technological innovation applied to sports performance (Under Armour, 2023)

## 3.2.3 Types of Analysis

Semiotic analysis and analysis of the contnets are the two chosen analysis methodologies. Semiotic analysis focuses on the signs, symbols, and meanings of advertising content, whereas content analysis studies the reactions and impressions of the public through user comments.

3.2.3.1 Semiotic Analysis: Analysis Grids, Analysis of Signs, Symbols and Visual Codes and Floch's Scheme

As previously stated in the chapter, semiotic analysis is a fundamental instrument for understanding how advertising communications generate meaning via the use of signs and symbols. This form of study helps you to break down an advertisement's content and learn how visual and linguistic choices influence the public's perception of the message.

To conduct the semiotic analysis, a *segmentation grid* will be used (Peverini, 2012), together with the Floch's validation scheme. This grid allows the commercial to be broken down into narrative sequences, analyzing each of them in terms of length, visual content, soundtrack, camera angle, lighting, and color. The segmentation grid assists in identifying the primary aspects of meaning inside the ad, such as the usage of colors, which can elicit specific emotions, and the placement of shots, which can alter the viewer's perspective. The division of advertising material into smaller portions enables you to examine in depth how each style choice adds to the overall message of the commercial. The examination of the signs and symbols used in the selected ads is based on the identification of denotative and connotative meaning. This step entails a thorough evaluation of visual codes, such as images and symbols, which aid in the communication of brand values. For example, using either warm or cold hues might alter the viewer's emotional perception, linking the commercial with feelings of comfort, professionalism, or tension.

Jean-Marie Floc's valorization scheme is a semiotic methodology that enables us to analyze and categorize the manner in which an advertising message assigns value to an object. It concentrates on four primary modalities of valorization: Practical, Utopian, Ludic, and Critical.

This approach is especially valuable in the field of advertising as it enables the identification of the tactics employed to place a product in the market, therefore emphasizing both its practical and emotional values.

Floch proposes an approach in which advertisements can be analyzed through an oppositional structure (Sugoni, 2012). He contrasts four major categories of valorization which are:

- 1. *Practical valorization:* Focuses on the utility of the object, highlighting the functional and rational characteristics of the product. This category is related to use values and focuses on what the product can actually do.
- 2. *Utopian valorization*: Connects the product to a social sense or ideal, often presenting it as part of an ideal vision of the future. This valorization draws on basic values and is oriented towards desires influenced by the consumer's lifestyles.
- 3. *Critical valorization*: Provides a more rational and critical analysis, often in relation to the product's convenience and value for money. The emphasis here is on analyzing the product in terms of costs and benefits, emphasizing a more practical perspective.
- 4. *Ludic valorization*: It emphasizes the aesthetic dimension of consumption, the relevance attributed to the value that is neither practical nor utilitarian but hedonistic.

These enhancements can mix and are not mutually exclusive. In fact, advertising could present itself as practical but at the same time critical or vice versa utopian and ludic.

In the context of this work, Floch's valorization technique will be utilized to assess the selected commercials, with an emphasis on how AI is represented and what type of valuation is assigned to it. This analysis will contribute to the analysis by providing a deeper understanding of how AI is perceived in different advertising contexts. Through Floch's scheme, it will be possible to identify how commercials influence user sentiment and how AI is used to generate certain sense effects and emotional responses. This allows us to better understand the emotional impact of the use of AI in advertising campaigns, highlighting both the potential and the critical issues related to its representation.

#### 3.2.3.2 Content Analysis

Following what has already been described, a qualitative analysis of the content will be carried out, through the help of automated tools. This analysis will be conducted by collecting and analyzing user comments left under the videos of the commercials on digital platforms such as YouTube and social media.

The analysis of the contents will be carried out with the support of tools which, using natural language processing (NLP) approaches to identify user comments as positive, negative, or neutral. This methodology enables you to measure the audience's emotional response and detect repeating themes in comments, such as praise for the usage of AI or criticism of its implementation. This type

of analysis is based on algorithms that examine the terms and expressions used in comments, assigning a sentiment score that represents the main feelings that people are expressing. The accuracy of the analysis can be increased by training these algorithms on datasets containing prior remarks. *NVivo* software will be utilized for the content analysis because it is well-known for its capacity to manage substantial volumes of qualitative data and carry out in-depth content analysis. With its ability to automatically input and encode data and categorize it based on themes and attitudes stated, NVivo leverages built-in NLP algorithms to perform autonomous analysis, giving you a full picture of your audience's perceptions. The software can effectively scan hundreds of comments, providing useful information into how people perceive AI-powered marketing campaigns.

The combined use of semiotic techniques and analysis of reactions will provide a comprehensive picture of the emotional impact of ads and the efficacy of AI-based marketing initiatives.

The content analysis process through the NVivo software will therefore follow a very precise process, consisting of several steps and steps to be followed in order to obtain useful insights aimed at pursuing the research question. The following is the process by which the analysis will be carried out:

- 1. The **first step** is the collection of comments from the videos that have been selected and analyzed. This is a simple but necessary activity that will be used to obtain the database to be analyzed for the experiment. The collection can take place in two ways:
  - a. *Manual collection* of comments from the comments section on YouTube, where each comment will be taken, copied and pasted into an extended file to be later analyzed.
  - b. *Automated collection* with the help of comment scraping software, which allows you to automatically collect comments and export them in the format of your choice. This process can be carried out in several ways, through python libraries or ad hoc software. Specifically, Octoparse was used in this work.
- Data cleansing is the second step to be performed. Comments that are not related to the video, such as spam or unrelated comments, will be removed from the total number of comments collected, along with any comments with special characters that are not relevant nor understandable.
- 3. The **third step** is to import the data into the NVivo environment, where it will be renamed and assigned to a profile.
  - a. In this work, the data will first be saved in an Excel document and then inserted after checks, in a document or Word that will be imported into NVivo to be used.

- 4. The **fourth step** involves the creation of thematic nodes and the coding of comments. Each node will be used to codify the sentiment of the comments. The comments will be analyzed one by one and based on the text assigned to one of the nodes that represents the senitment of the comment in order to feed the analysis.
  - a. To enrich the analysis in this work, a query will also be executed that will allow you to obtain a Word cloud of comments.
- 5. The last step involves data analysis, the generation of graphs and the interpretation of the results.
  - a. Part of this step will be reported in the next chapter which will deepen the results and implications before reaching conclusions.

## 3.3 Semiotic Analysis of Commercials

In this section I will analyze the commercials presented previously, dissecting them through grids and then proceeding with the analysis of signs, symbols and visual contexts.

#### 3.3.1 Make It Real: Segmentation of the adverting

Below is the table with which the BMW advertisement "Make It Real" was broken down. Each section has the details inside.

N. Sequence	Sequence Length	Visual Column	Soundtrack	Notes
1	0.00 - 0.04	- Content Description:	As for the entire	N/A
		The commercial begins	duration of the	
		with a shot from the	commercial, the	
		shoulders of Lil Miquela,	characteristic	
		the protagonist of the	soundtrack of the	
		commercial, initially	commercial is	
		turned partly towards the	reproduced in the	
		observer and then turns	background.	
		his gaze towards what is	Beyond that, there	
		in the background, a ray	are no other	
		of light / energy that	sound effects in	
		stands out in a futuristic	this segment.	
		and dystopian landscape,		
		with a desert appearance		
		and changing in its		
		composition. So, then we		
		see in the same scenario		
		the BW iX2 moving		
		straight towards the beam		

		of light, driven by Lil Miquela (0.03-0.04).  - Fame Width: The shot starts from a high- shouldered view that zooms in in the first seconds and then detaches and has a transition towards the American plane with the two protagonists, Lil Miquela and the car, in the center. In the last seconds of the sequence, the camera moves away, fully filming the scenario and the moving car, all from above.  - Camera Angle: As with the whole commercial, the angle of the camera is horizontal and focused on		
		a cinematic rendering - Illumination: The light in this segment appears artificial and typically cold. This recalls the futuristic and aseptic nature of the scenography Color: The main colors represented are cold ones.		
2	0.04 - 0.06	- Content Description: In this quick sequence, first the eye and then the face of the protagonist are framed in detail. the face reveals a first emotional reaction of the subject. The setting is dark. and intimates as if to recall an internal reflection of the subconscious Fame Width: The sequence presents a detailed view that	There are no sound effects except for the main soundtrack of the commercial	

		changes into an extreme		
		close-up		
		- Camera Angle: Also		
		here we have an		
		horizontal camera angle.		
		- Illumination: The light		
		is almost nothing in this		
		sequence, which appears		
		dark and deep.		
		- Color: The main colors		
		represented are warm		
		ones.		
3	0.07 - 0.11	- Content Description:	In addition to the	
		The protagonist in this	soundtrack, there	
		sequence finds herself	is the sound of the	
		catapulted to driving the	dragonfly s	
		car into the real world. At	flapping wings	
		first, she is taken by	and an effect to	
		surprise when she	recall the	
		observes a dragonfly	dematerialization	
		passing by her window.	of the	
		There is then a transition	protagonist's	
		to the next scene in which	body.	
		he is in a bucolic		
		landscape and observes		
		the dragonfly resting on a		
		boulder. The last seconds		
		see an attempt by the		
		protagonist to touch the		
		insect, a vain attempt as		
		she is virtual, followed by a shot that shows her		
		amazement and her		
		reaction to what		
		happened.		
		- Fame Width: The shots		
		go from a first close up in		
		which the dragonfly		
		appears, to a full figure,		
		to close with an extreme		
		close up.		
		- Camera Angle: Also		
		here we have an		
		horizontal camera angle.		
		- Illumination: The light		
		is almost nothing in this		
		sequence, which appears		

		<del>-</del>	<del></del>
		dark and deep. The light	
		in this sequence is	
		present even if it is not	
		clear compared to the	
		rhyming images. the	
		tones are initially cold.	
		- Color: The main colors	
		are initially of cold	
		<u> </u>	
		shades, with the	
		exception of the red of	
		the magic, but gradually	
		converge towards warmer	
		and brighter shades at the	
		end.	
4	0.12 - 0.16	- Content Description:	In addition to the
		This segment begins with	soundtrack that
		a reprise of the	develops with the
		ventilation grille of the	commercial, it is
		new BMW, and then	possible to listen
		shows the car in its	to laughter in the
		entirety with a summer-	distance of the
		themed background, with	subjects in the
		sea and cliffs. then we	frame.
		move on to a queering of	name.
		the protagonist who	
		observes people from the	
		car. Subsequently, people	
		joking and having fun are	
		shown with a view from	
		the car and finally a	
		couple intent on talking	
		in each other's ears in	
		intimate attitudes.	
		- Fame Width: The	
		frames are in order, first	
		in detail on the grille of	
		the BMW, then a close-	
		up, followed by full	
		figures and mid-planes.	
		- Camera Angle: Also	
		here we have an	
		horizontal camera angle.	
		- Illumination: The light	
		_	
		is strong and natural	
		throughout the sequence.	
		- Color: The colors are	
		purely warm and with	

		bright and summery	
		shades.	
5	0.17 - 0.25	- Content Description:	It is possible to
3	0.17 - 0.23	The sequence is mainly	hear in addition to
		set in the city. The first	the soundtrack
		seconds in the segment	some hum effects
		are car cars moving	in the first few
			seconds which
		through city streets. then	
		you have a transition, and	disappear almost
		you have a view from	immediately
		medium height in an urban center. The car	
		stops at a stop sign to	
		allow pedestrians to	
		enter. This is followed by	
		a sequence of a few	
		moments in slow motion	
		in which the main subject	
		is a happy and carefree	
		girl. This is followed by a	
		short scene of a zoom on	
		the face of a mother and	
		her child. Then it closes	
		with shots of the BMW	
		moving through the	
		empty streets of the city.	
		- Fame Width: The	
		frames are in order, first a	
		full figure, then detail of	
		the car, full figure of the	
		car at the stop, mid-plane	
		of the girl, extreme close-	
		up of the mother and the	
		child. At the end different	
		full figure of the car.	
		- Camera Angle: Also	
		here we have an	
		horizontal camera angle.	
		- Illumination: The light	
		is soft to represent the	
		classic white and gray	
		light of rainy and gloomy	
		days.	
		- Color: The colors have	
		cool tones and especially	
		grays.	
6	0.26 - 0.38	- Content Description:	Superimposed on
		In the segment we have	the soundtrack

	T	T	Ţ
		in the first few seconds	you can perceive
		the BMW driving in a	disco basses that
		dark environment and	sound but are
		indoors, with light fog.	muffled to seek a
		Then then an immediate	distance of the
		transition on the	sound.
		protagonist walking	
		while in the middle of a	
		"rave" with the people	
		around her dancing. A	
		detailed view shows us	
		his hand dematerializing	
		in contact with a beam of	
		light and then becoming	
		matter again. He then	
		accidentally bumps into a	
		boy jumping for the	
		amazement of finally	
		being able to touch. The	
		last moments show us an	
		attempt to kiss by the boy	
		and the detail of the rim	
		of the new BMW in	
		motion, all in rapid	
		succession with clear and	
		fast transitions.	
		- Fame Width: The	
		views in this segment are	
		detailed, mid-plane,	
		close-up and american	
		plane (not in order of	
		appearance)	
		- Camera Angle: Also	
		here we have an	
		horizontal camera angle.	
		- Illumination: The	
		lights are dark and few,	
		mostly artificial. The	
		environment is that of a	
		discotheque or disco.	
		- Color: The shades are	
		mostly cold and between	
		the scales of white, black	
		and gray.	
7	0.39 - 0.43	- Content Description:	Soundtrack
		In this short sequence Lil	accompanied by
		Miquela gets back in the	sounds such as
		car again. His reaction is	the fingering of

		I	T T
		similar to that of waking	the hands or
		up from an engaging and	palms
		realistic dream. She is	
		amazed and touches her	
		hands, pointing out that	
		Pra is no longer just a	
		digital entity. In the last	
		moments, touching his	
		lips with his fingers, he	
		seems to be thinking	
		about the next steps to	
		take.	
		- Fame Width: The	
		frames are close-up and	
		detailed on the hands.	
		- Camera Angle: Also	
		here we have an	
		horizontal camera angle.	
		- Illumination: As in the	
		other scenes inside the	
		car, the light is almost	
		absent, and the	
		environments are dark to	
		bring out the colors of the	
		protagonist.	
		- Color: Mainly warm	
	0.42	tones and scales of reds	TO 1
8	0.43 - 0.47	- Content Description:	The soundtrack is
		The segment began with	superimposed on
		footage of the new iX2	the sounds of the
		whizzing through various	car speeding
		roads and off-road dirt	through roads and
		roads, while night and	dirt roads, as well
		day follow one another.	as the noises of
		This until we reach our	the door closing
		destination, which is the	on arrival.
		same beam of light that	
		we saw in the first	
		sequences. Lil Miquela	
		gets out of the car to observe the beam that is	
		in the middle of a desert	
		landscape.	
		- Fame Width: Mainly	
		Full-figure and a close-up in the moment in which	
		the protagonist evita the	
		the protagonist exits the car.	

	<u> </u>	C A 1 A1	<u> </u>	
		- Camera Angle: Also		
		here we have an		
		horizontal camera angle.		
		- Illumination:		
		Alternating lights with		
		different shades. In the		
		daytime scenes, the light		
		is natural, and the colors		
		are warm for the most		
		part.		
		- Color: Mainly warm		
		tones and scales of reds.		
10	0.48 - 0.51	- Content Description:	Sounds of the rain	
		The scene begins with the	falling on the	
		protagonist who turns her	hands of the	
		gaze to the sky realizing	protagonist and	
		that it is starting to rain	the accompanying	
		and is initially amazed.	soundtrack	
		he places the palms of his		
		hands facing upwards		
		that are wet by the		
		raindrops, while the		
		white claim "MAKE IT		
		REAL" appears in		
		superimposition.		
		- Fame Width: The		
		frames are close-up and		
		detailed on the hands and		
		the raindrops.		
		- Camera Angle: Also		
		here we have an		
		horizontal camera angle.		
		- Illumination: The light		
		as in the previous		
		sequence is natural, that		
		of a sunset		
		- Color: Mainly warm		
		tones.		
11	0.52 - 1.00	- Content Description:	In addition to the	
		last session before	soundtrack, in this	
		closing. It begins with the	sequence we have	
		protagonist intent on	a female narrator	
		returning, while hinting	who introduces	
		at a smile on her lips, in	the car and invites	
		the car. Then we have a	viewers to try it	
		transition to a scene in	out and discover	
		which the car whizzes by	it, instilling the	
		and several writings	commercial	

1	0.1
appear on the screen,	nature of the
starting with the claim	commercial.
"THE NEW iX2" typical	
of BMW cars.	
Afterwards, various	
commercial writings	
appear on the screen.	
Then the car leaves the	
frame and the BMW logo	
and the "i" of the electric	
line of the German	
company's cars appear,	
before closing the	
commercial.	
- Fame Width: The	
frames are close-up and	
full figure in the last	
scenes before the end.	
- Camera Angle: Also	
here we have an	
horizontal camera angle.	
_	
- Illumination: The light	
as in the previous	
sequence is natural	
- Color: Mainly warm	
tones.	

## 3.3.2 Make It Real: Signs and Context

BMW's "Make It Real" advertisement is a complex illustration of how a brand can employ semiotics to create an advertising message that not only promotes a product, but also expresses a future vision and corporate identity. The use of Lil Miquela, a virtual influencer created through artificial intelligence, and the futuristic setting of the commercial are elements that deserve an in-depth analysis through the lens of semiotics.

In this commercial, Lil Miquela acts as the anthropomorfization of the idea of an effective integration between the real and digital worlds. Even though Lil Miquela is entirely digital, she symbolizes the merging of these two realms since she is a real-world person that lives and interacts with others.

In the context of BMW's advertising narrative—a brand that presents itself as a technical innovator—this symbol is very potent. Lil Miquela, an artificial intelligence invention, represents BMW's potential to steer the future not only through superior technology in its automobiles, but also through the adoption and promotion of new technological frontiers. This is no random decision; rather, it is a

deliberate plan to match the brand's values with current, avant-garde, and appeal to the younger, technologically savvy markets.

The visual context of the commercial is dominated by elements that evoke a technological and refined future. Gray and other cool colors like blue are linked to innovation, technology, and accuracy. These hues create an environment that embodies BMW's ideals as a brand that not only welcomes technology but pushes it to new heights in an ultramodern metropolitan setting.

The scenography and cinematography used for the advertisement adhere to the criteria of the cultural code, which is essential for the building of the brand's meaning (Oswald, 2012). Every picture, from camera placement to seamless transitions between real and digital scenes, is intended to underline the continuity between the real and the virtual, implying that technological innovation is more than simply a tool, but an essential component of the modern human experience.

The use of Lil Miquela might also be viewed through Roland Barthes' concept of mythology. According to Barthes, modern myths work as systems of signs that convey cultural ideologies. In this scenario, Lil Miquela is more than just an AI product; she represents the modern mythology of human-machine integration, a repeating topic in contemporary culture that examines the borders between natural and artificial.



Figure 3.8: Frame from the section 10 of the spot Make It Real

Source: (https://www.youtube.com/watch?v=ST1Lojjz2jw)

The representation here reflects the belief that the future will be determined by our capacity to incorporate technology into our daily lives while maintaining our humanity. BMW leverages this mythology to cement its position as a pioneer in automotive technology, a brand that not only makes vehicles but also defines how we will live and engage with technology in the coming decades.

## 3.3.3 Make It Real: Vaorization scheme

As described and analyzed above, the BMW commercial uses AI in an innovative way to represent a fusion between the real and digital worlds, staged through the presence of virtual influencer Lil Miquela as the protagonist. We are going to analyze this spot according to Floch's valuation scheme, presented in the previous paragraphs, considering the four main categories of value. This will allow us to understand how AI is used not only as a purely technological tool, but also potentially as a narrative element with the power to influence the viewer's perception of the brand and product.

#### 3.3.3.1 Practical Valorization

Practical valorization refers to the concrete and utilitarian function of the semiotic object. In this commercial, AI is represented through Lil Miquela, a digital avatar that interacts with the real world, suggesting the idea of a technological advancement that enriches the consumer experience. The use of Lil Miquela highlights BMW's technological innovation, showing AI as a practical extension of the digital world, capable of enabling new forms of interaction and communication.

In the commercial under analysis, AI is not only a narrative device, but also a symbol of precision and cutting-edge technology. Cars with electric motors today represent the future of sustainable mobility in the common image and the presence of Lil Miquela reinforces this narrative. The implicit message is that technology, including AI, is not an end, but a means to improve efficiency and consumer experience, making driving not only more sustainable, but also more interactive and engaging.

### 3.3.3.2 Utopian Valorization

The utopian enhancement in the commercial is evident in the idea of fusion between the real and virtual worlds. Lil Miquela, despite being a digital creation, lives human experiences in the physical world, prompting a reflection on how AI can enrich our daily lives.

A futuristic utopia where technology is seen as an ally enabling humanity to transcend the boundaries between the actual and virtual worlds rather than as a threat is evoked by the depiction of a world where AI and reality coexist together. In addition, the concept of "realization" (make it real) is amplified by the use of Lil Miquela, suggesting that even what is virtual can become "real" through interaction with the physical world. In this context, technology becomes the bridge that connects the dream of an advanced technological future with reality, enhancing BMW's role as a pioneer in innovation.

### 3.3.3.3 Critical Valorization

The critical valorization is implicitly manifested in the way in which the commercial deals with the theme of simulation and virtual reality. While promoting AI as something positive, the commercial could raise questions about the authenticity of digital experiences. The fact that Lil Miquela is an artificial being even though she seems real can cause viewers to feel unclear and emphasize the possibility of a break between the actual and virtual worlds.

The commercial, therefore, can also be interpreted as a critical reflection on how technology is influencing our perception of reality. This ambivalence is not explicit but is perceived through Lil Miquela's fluid integration into the real world, a fusion that can raise ethical questions about the use of AI and simulations in our daily lives and, in particular, in advertising communication.

### 3.3.3.4 Ludic Valorization

Finally, ludic enhancement is a key component of the commercial, where AI is presented in a creative way. The figure of Lil Miquela, in addition to representing a technological innovation, introduces an element of entertainment and wonder. The visual narrative, with the protagonist exploring the real world, creates a ludic dimension in which technology is synonymous with fun, creativity and discovery.

The ludic component sparks the public's curiosity while enhancing the ad campaign's stunning and artistic elements. Little Miquela is more than simply a virtual persona; she represents a time in the future when artificial intelligence and technology will provide novel and thrilling experiences.

### 3.3.3.5 Discussion

The analysis of the "Make It Real" commercial through Floch's enhancement scheme allows us to understand how AI is used to generate an emotional and cognitive impact on the audience.

The practical enhancement highlights BMW's technological efficiency, while the utopian one suggests a future vision where the digital and the real coexist. The critical and ludic dimensions, on the other hand, focus on ethical reflection and the creative potential of AI. These elements help answer the research question on the emotional impact of AI in advertising campaigns, showing how it can influence viewer sentiment, both as a tool for progress and as an element of entertainment.

# 3.3.4 Forever is Made Now: Segmentation of the Advertising

Below is the table used to segment the Under Armour commercial "Forever is Made Now:

- 6					
	N. Sequence	Sequence Length	Visual Column	Soundtrack	Notes

	0.01 – 0.10	- Content Description: The spot begins with an aerial shot of a desert, quickly you move over the desert to a rocky gorge, in which you will wander along it until you wander at the end of it where the statue of a boxer (Anthony Joshua) stands out on the horizon. The sequence seems to speed up, as we can. notice from the sky, which passes from day to night until the dawn that we find at the end of the sequence Fame Width: Midplane and field-shot - Camera Angle: The commercial is shot horizontally but the camera makes 360-degree turns during the sequence - Illumination: We have a strong contrast of light and shadow, with peaks of illumination reached on the end of the sequence - Color: The sequence is in black and white and there are no colors.	A hint of music can be heard in the background to create suspense and give an idea of the beginning. The protagonist is then heard starting to speak, starting the speech that characterizes the whole commercial.	N/A
2	0.11 – 0.20	- Content Description: The sequence begins with a shot that gradually approaches the statue of the boxer, which appears to be made of marble, which begins to crumble into pieces that float in the air. The next shot shows us the details of the statue as it crumbles, starting from the glove to	A background melody is heard that picks up from the sounds of the previous sequence. The narrator of the protagonist continues his speech by saying the phrase "you	N/A

		climb towards the boxer's temple, until it reaches the head. The sequence closes with a black cut after entering the cracks that have formed inside the head of the statue.  - Fame Width: Midplane that zooms in and details  - Camera Angle: The angle of the camera is horizontal  - Illumination: As in the first sequence, the lighting is rendered by the high contrasts between white and shadow lights  - Color: The main colors represented are cold ones, with some warm colors	can fight or you can fail"	
2	0.21 0.45		T1 11	
3	0.21 – 0.45	- Content Description: in this sequence the CGI images alternate with real footage of Anthony Joshua training or in the middle of fights in the ring. The images follow one another quickly. In the first seconds storms are represented, the crumbling of the statue and the protagonist at the corner of the ring in a pause that is wounded and in crisis. Then came the images to represent the turning point and the revenge, the statue is reassembled from the rubble, real and CGI images show training, fights and flames Fame Width: Full- figures, mid-plane, detail and close-up	The background melody is enriched by sound effects that characterize the scenes shown, such as the screams of buzz of the audience, the labored breaths of training and matches, the movements of shoes in the ring. The protagonist continues his monologue with the phrase "Because time doesn't care, is happy to forget you".	

	<u> </u>	G A 1 771		
		- Camera Angle: The		
		angle of the camera is		
		horizontal		
		- Illumination: We		
		always have a strong play		
		of light and shadow in		
		this session. The artificial		
		lights of the flashes are		
		often present and		
		represent part of the		
		lighting in many of the		
		scenes.		
		- Color: The sequence is		
		in black and white and		
		there are no colors		
4	0.45 - 0.59	- Content Description:	The soundtrack	
		The last sequence opens	heard previously	
		with a figure, the	continues in this	
		protagonist, floating in	sequence, with a	
		the air in a scene set in a	cut that highlights	
		landscape similar to the	the athlete's	
		desert one of the first	words, namely	
		sequences with a solar	"Today is made of	
		eclipse in the	yesterday, and the	
		background. the details of	future is made	
		the protagonist's clothing	when you fight,	
		are then framed, i.e. a	like there's no	
		technical Under Armour	tomorrow"	
		t-shirt with the brand's		
		logo. Then follows a shot		
		that from the background		
		leads to a total view of		
		the rocky and desertic		
		landscape where the		
		Under Armour logo in		
		stone stands out in the		
		center of the frame, then		
		in front of it the statue of		
		Joshua that reassembles		
		after crumbling, to move		
		and throw a punch,		
		sending black and leaving		
		the words "Forever is		
		made now"		
		superimposed.		
		- Fame Width: Full		
		figure, detail shots		
		riguic, uctaii siiots		

- Camera Angle: As with
the whole commercial,
the angle of the camera is
horizontal.
- Illumination: Less
lighting makes room for a
greater use of shadows
and soft lights that
visually render the effect
of the eclipse that is
represented.
- Color: As for other
sequences, grayscales and
black and white are the
only colors of the spot.

# 3.3.5 Forever is Made Now: Signs and Context

The visual context of the "Forever is Made Now" commercial is designed to communicate a message of endurance, perseverance, and mental strength, using a set of visual and cultural codes that resonate deeply with the brand's target audience. Each visual element is carefully chosen to reinforce Under Armour's image as a brand that supports athletes on their journey to push personal limits and achieve excellence. Under Armour's "Forever is Made Now" commercial uses a sophisticated combination of symbols, signs, and visual contexts to build a powerful and motivational message. This message is designed to strengthen the brand image as a promoter of resilience, mental strength and extreme physicality, leveraging semiotics to deeply connect with its target audience: athletes and individuals oriented towards overcoming their limits.

In the context of the commercial, symbols and signs are used to construct a narrative that emphasizes the theme of strength and perseverance. In the Under Armour commercial, various signs are used to build a message of strength and determination.

One of the symbols that we find inside this commercial is certainly the "*symbolism of time*". The very title of the commercial, "Forever is Made Now", contains a powerful temporal symbolism.

The belief of "forever is made now" implies that every moment is important and that decisions made in the present have implications that last. This symbolism is strengthened by representations of the athlete exercising in various settings, such as in flames, implying that success is the product of continuous work and dedication in the current time. The concept of time as a vital factor in success resonates deeply with the brand's target audience.

Figure 3.9: Frame of the commercial in which Joshua is depicted training in a ring engulfed in flames



Source: (https://toolofna.com/work/experience/forever-is-made-now/)

The protagonist therefore serves as a symbol of resilience and determination. He is depicted in powerful poses, with expressions of intense focus and determination, suggesting that he represents the culmination of mental and physical strength, which comes from the continuous commitment lavished, even and despite the difficulties and moments of "fogging", which are represented by the crumbling of the statue and the fatigue of the boxer in the first appearances in the commercial. This is contrasted by the revenge that determines the recompositing of the marble figure and the victory of the boxer in the matches. In this case, therefore, the hero is the athlete who fights against his own limits and imposes himself to overcome them, in a modern representation of mythology that replaces the "warrior in battle" as a symbolic figure who transmits cultural values and ideologies.

The commercial emphasizes the athlete's journey through significant visual contrasts such as alternating light and shadow, training scenes under awful weather conditions, and moments of calm reflection. These visual contrasts not only heighten narrative suspense, but also represent the challenges that must be overcome in order to succeed. These cultural and visual codes are therefore used to construct a powerful meaning that has a profound impact.

The visual background of the "Forever is Made Now" commercial is meticulously designed to convey a sense of commitment and strength. Training scenes are frequently staged in dismal locations, such as industrial buildings, fire rings, or rainy environs, to represent the hardships and adversities that athletes undergo. These visual choices create an ambiance that represents the culture of intensive training and pushing personal limits, values that Under Armour wants to identify with its brand.

Figure 3.10: Frame of the spot where the protagonist trains under heavy rain.



Source: (https://www.youtube.com/watch?v=-VrOv982U4A&t=1s)

The use of austere settings and dark color tones conveys a message of seriousness and dedication, reinforcing the brand image as a synonym of commitment and resilience. In addition, the use of these visual codes allows you to establish an emotional connection with your audience, suggesting that Under Armour products are designed for those who are serious about improving themselves and those who aim to achieve the best results. In the Under Armour commercial, the dramatic lighting, the choice of colors and the presence of athletes overcoming difficult conditions are all visual codes that reinforce the brand's positioning as a partner in athletic engagement. These visual codes allow you to create a brand identity that is resonant and resonant with your audience and target.

The music and sound effects in the "Forever is Made Now" commercial play just as important a role as the visual symbols in building the emotional atmosphere of the message. The soundtrack of the commercial is characterized by low tones and pressing rhythms, which create a sense of urgency and intensity. The sound effects, such as the sound of echoing footsteps or the athlete's labored breathing, serve to immerse the viewer in the world of intense training and physical fatigue. Music can be used to manipulate the emotions of the audience, as seen earlier in the previous chapter, preparing the emotional ground for the visual and verbal message. In the Under Armour commercial, the music and sound effects are carefully chosen to evoke a sense of urgency and determination, amplifying the persuasive power of the images

## 3.3.6 Forever is Made Now: Valorization Scheme

As described in the previous paragraph, the Under Armour campaign is part of a project that celebrates sporting excellence and reaching the heights of human potential through, achieved through advanced technologies, what artificial intelligence can be.

This commercial reflects not only the brand's focus on physical performance, but also a vision of the future in which AI plays a crucial role in optimizing human capabilities, both mental and physical.

To understand how the commercial represents AI and what values are associated with it, we will use Jean-Marie Floch's enhancement scheme, as done for the two previous commercials, taking into consideration the four categories of enhancement of the scheme.

### 3.3.6.1 Practical Valorization

Practical valorization, according to Floch, concerns the utilitarian and performative function of a product or technology, emphasizing its ability to respond to concrete needs. In the "Forever is Made Now" commercial, artificial intelligence is represented as an essential tool for improving athletic performance. AI is used to collect and analyze data related to athletes' workouts, providing real-time feedback that allows them to continuously improve. In this sense, technology is not just an accessory, but a fundamental element for achieving tangible results. The use of AI in sports demonstrates that technology is a key component of reaching high goals and outstanding performances. Some of the specific characteristics evoked by the commercial include real-time data analysis and workout customization, demonstrating how AI is an essential component of the path to success. This approach strengthens the practical function of AI, not as an end in itself, but as a necessary instrument for obtaining actual outcomes and continuously increasing performance.

### 3.3.6.2 Utopian Valorization

The commercial clearly reflects a utopian enhancement, through an idealized vision of the use of AI for human improvement. The very title of the commercial, "Forever is Made Now," suggests a concept of eternity and continuous refinement, an idea that is reinforced by the role of AI in the athletes' training process.

In this type of representation, AI appears as an almost "transcendent" technology, capable of leading the individual beyond human limits and towards a form of physical and mental perfection, making man able to access a new, higher and deeper potential (the power of data). This utopian enhancement is also built visually, with powerful images that evoke the determination and resilience of the athletes, with the protagonist dedicated to training in surreal conditions.

AI is therefore presented not as a simple technology, but as an element that contributes to an ideal of sporting perfection, embodying an optimistic vision of the future in which technology and man collaborate to achieve exceptional goals, such as victory represents the peak of sporting activity. The basic idea is that thanks to AI, there are no insurmountable limits, man, with the right technological support, can aspire to realize his maximum potential.

### 3.3.6.3 Critical Valorization

The commercial does not directly address practical or economic issues, but a possible critical interpretation can emerge from the way technology is represented and the dependence that it can arise from here on out.

The commercial could suggest, implicitly, that only thanks to AI can athletes achieve higher levels of performance. This raises the question of reliance on technology for human enhancement and leads to the question of whether athletes can achieve comparable results without technological support. This could indirectly be translated into marketing and other activities. Do we now need AI to elevate our ads? The question is clearly biased and aimed at generating debate, but it is very complex to answer. The presence of AI, therefore, opens a critical debate on the progressive replacement of human capabilities with artificial ones. This reflection, although not explicit in the commercial, could be perceived by the most critical viewers, who could wonder about the long-term consequences of technological dependence, both in the field of sport and physical performance and in all the contexts in which it has gradually taken hold and spread its "blanket". In this context, AI can be seen not only as an ally, but also as a potential factor of dehumanization, which risks shifting the focus from human talent to the dominance of technology.

### 3.3.6.4 Ludic Valorization

The advertisement employs AI to generate an engaging and dynamic watching experience that captivates the audience's attention. Integrating technology elevates it into a creative investigation of the opportunities that arise from the merging of human and machine, almost like a game with human limitations.

In this context, technology serves as both a useful tool and an instrument of amplifying the public's wonder and emotion. The commercial's capacity to transform the relationship between humans and technology into an artistic portrayal that emphasizes dynamism, speed, and physical perfection is a metaphor of its fun augmentation. This ludic approach contributes to the useful, aesthetically pleasing, and sensual qualities of AI.

### 3.3.6.4 Discussion

The analysis of the "Forever is Made Now" commercial through Floch's valorization scheme makes possible to understand how AI is represented as an essential component of the ideal of human and sporting excellence. Practical enhancement highlights the functional effectiveness of technology, while utopian enhancement enhances an optimistic vision of the future, in which AI allows human limits to be overcome. Critical enhancement raises questions about the dependence on technology, while ludic valorization emphasizes the aesthetic aspect of AI.

This analysis allows us to understand how AI in this context is a pivotal but not a protagonist tool, to raise the emotional level of the commercial, leveraging feelings typical of the sporting soul, such as revenge after a defeat, search for perfection, improvement of performance. The use of such an advanced tool aims to elevate the perception of Under Armour as a cutting-edge brand, capable of combining technology and humanity, to take performance to the next level. It is therefore possible to analyze how the aim is to profoundly affect the emotional perception of the viewers, generating feelings of inspiration.

# 3.3.7 The Ultimate Team Talk – Under Armour: Analysis of the spot

The analysis of the following spot does not follow the methodology seen so far. The purpose of this analysis is to reinforce what has been described so far for the Under Armour commercial "Forever is Made Now", i.e. the brand's desire to use AI as a tool to create campaigns capable of exciting the public and obtaining responses from viewers, for example with respect to the brand's desire to position itself as an innovator in the sportswear sector, adopting innovative advertising techniques never used before by other similar brands. The methodology used will therefore be that of semiotic analysis, together with Floch's valuation scheme.

The video analyzed, despite being an advertisement, presents a narrative structure that deviates from the classic canons of the genre, moving away from the typical sales elements and focusing instead on the construction of a brand identity. It's all about branding.

The video, with its strong emphasis on team identity and passion for the game, helps shape Under Armour's image as a brand that embodies values of strength, unity and perseverance. The use of the Under Armour logo, present on the protagonist's sweatshirt, acts as a constant visual attraction, consolidating the link between the image and the brand. The product, although not explicitly presented, is implicitly present in the context of the video, which is focused on the world of sport and athletic training. The sweatshirt with the Under Armour logo, worn by the protagonist, refers to sportswear and represents a brand image associated with training and athletic performance.

The commercial is part of a cultural context dominated by trends such as individualism, competition and the cult of the body, typically intrinsic to the world of sport, regardless of the level of competition, whether amateur or professional. The narrative, however, focused on strength, togetherness, and perseverance, embodies values that resonate with these cultural trends, creating a sense of empathy and belonging the commercial's audience.

Moving on to the analysis of the content plan, it reveals the emergence of a series of key themes, such as strength, unity, perseverance, competition and belonging, which intersect with the world of brand and product, already enunciated above. The enhancement of these themes translates into a brand image that evokes a sense of strength, unity and determination.

Let's analyze the first point exposed. The video is pervaded by an atmosphere of strength and determination, evident in the words of the protagonist, in the movements of the athletes and in the emphasis on the challenges that the team faces. This enhancement of strength is in line with Under Armour's brand image, which is aimed at an audience of athletes and sports enthusiasts, emphasizing performance and competition.

The message of the video revolves around the concept of unity, emphasizing the importance of the team and the bond between its members. The phrase "We stand as one" represents the fulcrum of this enhancement, creating a sense of belonging and solidarity. It is no coincidence that the choice of subjects such as players of renowned and winning teams is no coincidence. The idea is to convey an image of unity as a key element for victory, the union between the spectator and Under Armour equipment leads to success.

The narration emphasizes the importance of perseverance and dedication to sport, highlighting the commitment of the athletes during training, an element already underlined in the commercial previously analyzed, only that in that case the deidation is rendered by clear images of effort, here it is an indirect narration of what sport intrinsically entails, in terms of physical and moral commitment. This enhancement translates into a brand image that celebrates tenacity and dedication to success.

The video presents competition as a central element of the sporting world. The phrase "Are we the underdogs?" emphasizes the competitive context in which the team fits and the challenge it faces. The enhancement of competition translates into a brand image that celebrates ambition and the pursuit of victory. It is precisely in this that we can recognize Under Armour's pioneering choice to develop promotional campaigns with AI.

The team is presented as a group united by a strong sense of belonging, emphasized by the phrase "We play for each other". The enhancement of belonging translates into a brand image that celebrates cohesion and solidarity.

The commercial makes skillful use of audiovisual syncretism to create an engaging sensory experience and to effectively communicate its message. The rhythmic music, dynamic visuals and strong words of the protagonist create an intense and engaging atmosphere, which translates into a strong impression on the audience.

The protagonist serves as both a guide and narrator, and the entire narrative is presented in a linear but dynamic manner throughout the commercial. The audience's attention is preserved by a gripping rhythm that is established by alternating between tense and relaxed times, fast editing, and simple terms, snappy words. The commercial's diverse pace not only engages but strengthens the underlying message of power and endurance, creating a memorable experience.

### 3.3.8 The Ultimate Team Talk: Valorization Scheme

Also, for this spot we will carry out an analysis through Floch's valorization model, applying the valorization categories identified by him.

### 3.3.8.1 Utopian Valorization

Utopian valorization, in contrast to practical valorization, concerns existential values such as identity, adventure and personal fulfillment. The commercial focuses on these values, as the motivational speech created by AI is not limited to preparing athletes for the match, but seeks to inspire inner transformation, pushing the subject to push their limits and find their identity within the team. The use of AI therefore becomes a tool to help athletes realize themselves and build their identity as part of a group, emphasizing the importance of cohesion and a sense of belonging.

### 3.3.8.2 Discussion

This analysis reveals how artificial intelligence becomes a means of conveying emotions and strengthening the bond with the consumer. In this sense, the use of AI in the commercial plays a crucial role in trying to increase the emotional effectiveness of the speech and, at the same time, in positioning the brand as an innovator.

The commercial highlights how AI can generate highly emotional content that leverages the audience's identification with brand values. Using artificial intelligence to create a perfectly calibrated motivational speech, Under Armour aims to elicit emotional reactions in its viewers, placing determination, resilience and team cohesion at the center. Does he succeed? The performance in terms

of speech quality is polarizing. We have a discourse that certainly resonates if enunciated by a subject with prominent charismatic characteristics but which in its content could be stale, a little too trivial but at the same time perfectly encapsulates the key values. The reactions are divided between those who consider it a series of sporting clichés and clichés and those who praise its ability to excite overall.

# 3.3.9 Synthesis of AI values in commercials

The comprehensive study of the representation and perception of AI in the advertising context was made possible by the analysis of the ads chosen by Jean-Marie Floch's model. Floch's four recommended valorizations—practical, utopian, critical, and ludic—made it feasible to investigate the various connotations connected to the application of AI and how these affect the overall message of the advertisements.

In BMW's "Make It Real" analysis, AI is valued in both practical and utopian terms, representing an advanced technological tool that merges the real and digital worlds to create new forms of interaction. The commercial also raised critical questions about authenticity and virtual reality, highlighting the ethical implications of using artificial technologies. Finally, the ludic aspect enriched the campaign with a sense of wonder and innovation, making the AI captivating and engaging from an aesthetic point of view. The use of such an advanced form of AI to advertise such a technologically advanced machine is obviously not accidental but aims to deliver to the viewer that feeling of innovation to everything that BMW represents and predicts. just as the plot of the commercial campaign itself is not accidental, it sees, yes, the virtual model becomes human but at the same time it becomes so step by step traveling on its BMW which is not purely technology but sensations, such as the pleasure of driving and owning a BMW, returning to the ludic valorization.

Under Armour's "Forever is Made Now" commercial improved AI through practical valorization, emphasizing its importance in increasing athletic performance. Utopian valorization has strengthened the notion that technology enables athletes to surpass their limitations, adding to a narrative of perfection and progress. Despite the overwhelming positive elements, critical valorization has highlighted concerns about the increasing reliance on technology, whereas ludic valorization has changed the usage of AI into an appealing and inspirational aesthetic experience.

Combining innovative technologies such as artificial intelligence with the desire to position itself as a cutting-edge brand is a cornerstone of Under Armour's strategy. The choice to use AI, albeit in different ways, in the development of commercials such as "The Ultimate Team Talk" and "Forever is Made Now" is not accidental but responds to a precise desire to represent the brand as a synonym

for technological innovation. This branding strategy leverages AI not only as a tool to improve the quality of content, but also as a symbol of Under Armour's continued commitment to staying at the forefront of sports performance. He transfers the value we associate with AI, the tool that will revolutionize this historical era to his brand, wanting to become a leader of innovation in his products, the avant-garde of sport. Thus, artificial intelligence (AI) becomes crucial to conveying the message that the company is a leader in the application of cutting-edge technology to enhance athletes' performance and deliver highly customized and captivating advertising experiences, in addition to offering apparel and equipment. This strategy works especially well to set Under Armour apart from its rivals, establishing the company as a leader in technology that can successfully blend innovation and emotional appeal in addition to being a sports brand.

The frequent usage of AI in several marketing initiatives, such as "The Ultimate Team Talk" and "Forever is Made Now," suggests a clear branding approach that combines cutting-edge technology with the capacity to tell compelling stories. In this situation, technology becomes an essential component of the brand's pledge to deliver exceptional performance and to challenge athletes and customers to go beyond their comfort zones, in addition to serving as a practical means of achieving marketing objectives.

The analysis conducted through Floch's valorization scheme has made a significant contribution to the research question, which focuses on the emotional impact of the use of artificial intelligence in advertising campaigns in relation to user sentiment. Each commercial highlighted how AI can generate complex emotional responses, ranging from admiration and inspiration (as in the case of Under Armour) to fear and worry, and so, technology is not only a symbol of modernity, but a real marketing artifact that allows the brand to consolidate its cutting-edge positioning, without ever losing sight of the emotional potential that it can arouse in the public

The use of AI extends beyond its practical utility, encompassing symbolic and narrative implications that significantly shape public perception of the technology. As a result, AI is viewed not only as a driving force for advancement, but also as a source of concern and criticism regarding its impact on daily life and society.

Through this semiotic approach, it has become clear how AI can play a key role in the construction of the advertising message, generating meaningful effects that aim to influence viewer reactions in a decisive way.

# 3.4 Content Analysis of the Commercials' Comments

In this section, as anticipated in the previous sections, the analysis of the sentiment of the comments section of the three commercials selected for the job will be reported. The goal is to analyze the sentiment:

- to understand the general mood of users with respect to advertisements, whether positive
  or negative,
- 2. to understand **the mood in respect of the use of the AI**, and so, by considering only the comments in which AI is cited.

In addition, the frequency of words used will be analyzed to understand the themes more deeply and find out whether the use of AI technologies for the creation of emotional advertisements in different sectors is successful or if it is unsuccessful. In addition, we want to understand if the difference in sector can impact these results through the analysis of the comments and reactions of users who have viewed the markets.

The analyses carried out for each of the selected commercials were therefore two: word clouds to see the frequency of the words used and understand the main themes that characterize the conversations, and comment coding to analyze the sentiment of the conversations. In the first case, the analysis makes it possible to count the times in which the various words are used, then visualize the data in the form of words of various colors and thicknesses that depend on the frequency with which they appear in the comments as well as their position in space. This representation allows a quick understanding of the topics of the conversations, which are thus more immediate. The analysis of the sentiment of the comments, on the other hand, makes it possible to understand and classify the emotions that the various users have expressed with respect to the content they have seen. Thanks to this analysis, it was possible to identify, for each of the three spots, whether the sentiment was positive, negative or neutral.

# 3.4.1 Make It Real: Content Analysis

The spot created by the Bavarian car manufacturer in collaboration with the virtual influencer Lil Miquela (whose existence is based on artificial intelligence) was the first of the commercials to be analyzed. The version of the commercial taken into analysis, the same as the one previously analyzed from the point of view of content, is the shortest one also used for television commercials.

About 110 comments were collected from the comments section. All invalid comments were then eliminated from the total, i.e. all those comments that were meaningless or the translations of which

were not meaningful or including slang that made the comment ambiguous. This process was carried out both to analyze first the general sentiment and then for the sentiment of comments containing direct reference to the word AI or artificial intelligence. This resulted in a total of 61 comments for the first analysis and 22 for the second.

First of all, once the screen of all invalid comments, a query was launched in order to obtain a word cloud with the remaining comments. This made it possible to highlight the words most used. Following there is the visual representation of the results of the query.

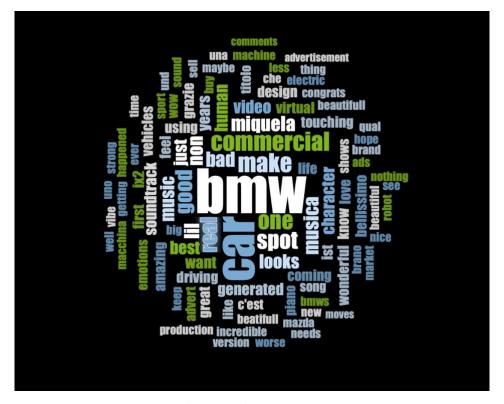


Figure 3.11: Word cloud of the spot Make It Real.

Source: (NVivo analysis conducted by the author)

It is easy to know how the most common words are "BMW, car, real, bad" and the others to follow. From this first analysis we can understand how for this commercial the theme of AI has taken a back seat to the commercial itself, the soundtrack or other components. This could be guessed by the fact that the artificial intelligence in this commercial is present in a "disguised" way in the guise of Lil Miquela. advertising could be defined as a common commercial and yet inside it there are actually CGI, simulation of facial expressions based on analysis of myriads of data, and all the components that contribute to feeding the character of Lil Miquela, who is in fact the protagonist, together with the BMW car, of the commercial, thus becoming the AI a fundamental part of the commercial and its

creation, without it, the protagonist would not have "life" and could not operate as an actress in the commercial.

Let's now move on to the analysis of viewers' reactions. To carry out these analyses, 3 nodes for each analysis were coded that made it possible to categorize the comments relating to the commercial. For the first one, general sentiment the nose coded are:

- 1. *Positive Sentiment*: This category includes all comments that express a positive feeling towards the commercial and therefore the emotive leverage effect has obtained a positive result, creating a positive reaction. The text of the comments presented in this node contains words such as amazing, real, love, spectacular, etc. but also emojis such as hearts, smiley faces or emojis that express positive and appreciative feelings such as "\(\exists \)", or "\(\exists \)".
- 2. Neutral Sentiment: In this category were included those comments that did not expose particular propensity towards the commercial, neither in the opposite nor in the opposite one. Belonging to this category are those comments that praised for example the performance but did not define themselves as lovers of the spot who gave opinions without exposing themselves, therefore containing terms such as accurate, well made, ok, indifferent. Often comments that speak more about the technology used in the creation or the design of the commercial belong to this category.
- 3. *Negative Sentiment*: This category, on the other hand, contains all the comments that express sentiments contrary to those of the first category. There are comments that contain negative adjectives such as shame or dislike. Emojis were also considered, keep in mind the text that accompanied them if any.

For the second analysis, relating to the use of AI, the categories were as follows:

- 1. *Positive Impact*: In this category all those comments are included that give a positive feeling with respect to the use of AI for the creation of the commercial or for the presence of these technologies within it.
- 2. *Neutral Impact*: To this category belong those comments that talk about AI without going too far and with a typically critical and impartial eye.
- 3. *Negative Impact*: In this knot we find those comments that explain a negative feeling with respect to the presence and use of AI in the BMW commercial.

Starting from the first analysis, the results are presented in graphical format.

General Sentiment

40
35
30
25
20
15
0

Positive Neutral Negative

Table 3.1 General Sentiment: Comment coding results

Source: (Excel)

As shown by the graph, the sentiment of comments for this commercial turned out to be very positive. The reception of advertising is strongly positive, demonstrating a strong emotional resonance with the users who have viewed the content. It should also be contextualized in this case that artificial intelligence in this case is masked in its use, even if it is present in the foreground. nevertheless, the results show a generally positive sentiment, with a percentage coverage that shows 62% of the comments belonging to the Positive Sentiment category and 25% (24.6% to be precise) belonging to the opposite category Negative Sentiment, as shown by the table below. The remaining 13% are categorized as Neutral Sentiment.

General Sentiment

70.00%

60.00%

50.00%

40.00%

20.00%

10.00%

Positive Neutral Negative

Table 3.2 General Sentiment: Percentage of Coverage

Source: (Excel)

By intersecting the results of the word cloud with those of the General Sentiment, it is understood how the commercial was liked and that the conversations focus more on appreciating the quality of the commercial, its soundtrack and the consistency of the title with the visual rendering. The fact that most of the comments do not contain a reference to AI makes it clear that this is often so integrated for viewers that it is very natural.

Now let's move on to the relative impact and use of AI.

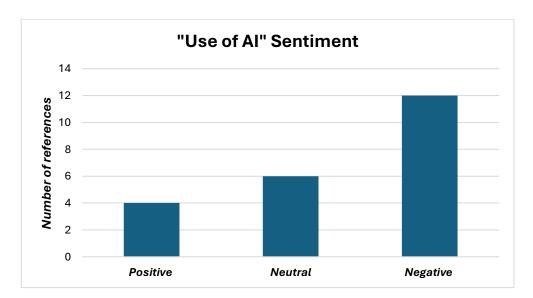


Table 3.3: Use of AI Sentiment: Results

In this case, it is interesting to note that in the case of comments that contain references to AI, the sentiment is reversed and presents a greater number of comments belonging to the Negative Impact category. The Positive Impact category in this case turns out to be the last in terms of number of comments.

About 55% of comments mentioning AI express negative sentiments with words such as "shame" or "boycott", despite the general sentiment for the commercial being predominantly positive. This follows even more how the commercial presents a well-integrated use of AI which, although not appreciated in its being, is not invasive and particularly impactful for the user.

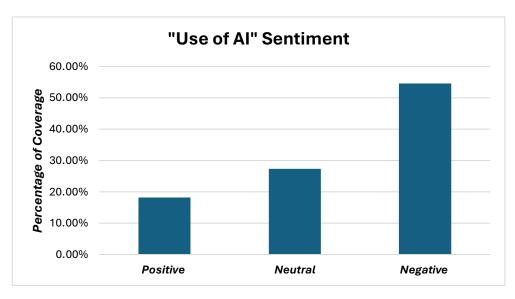


Table 3.4: Use of AI Impact Sentiment: Percentage of Coverage

Source: (Excel)

## 3.4.2 Forever is Made Now: Content Analysis

The Under Armour commercial starring Anthony Joshua, a professional boxer, which was previously analyzed on the content and semiotics side, is the latest to be analyzed.

The video has a comment section with 227 user comments. These were collected and analyzed in order to be able to evaluate their validity during analysis. After removing nonsensical comments, those in foreign languages that could not be used and those in which there were only emojis that could not be traced back to categories, the remaining sample has 63 comments that were analyzed to identify the general sentiment with respect to the spot, while in analyzing the sentiment with respect to the use of AI, 42 comments were analyzed.

First, an analysis of the most used words was carried out to produce a visual representation through a word cloud.

Observing this graphic representation, it is striking how the most recurring words and themes are "creativity", "work", "humans" and "people". This makes us understand how the theme of discussion often focuses on creativity and work, indicating how the use of AI is widely perceived and known.



Figure 3.13: Word cloud of the Forever is Made Now spot

Source: (Excel)

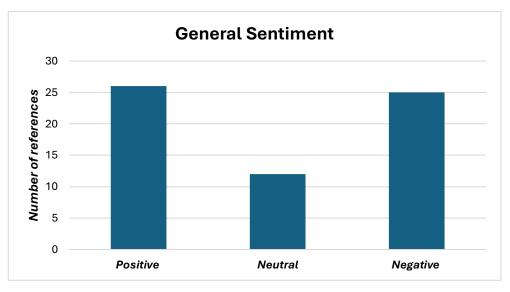
Moving on to the content analyses, in this case we also have two analyses identical to the previous ones, each with 3 categories of comments. The first analysis concerns the general sentiment of users with respect to the Under Armour commercial and presents these thematic nodes:

- 1. *Positive Sentiment*: Category that contains comments with positive sentiment with respect to advertising. Example is any comment that contains the words "love", "I love" or "wonderful" or characterized by the use of emojis that resemble positive feelings and attitude.
- 2. *Neutral Sentiment*: In this section we have the presence of comments that do not expire in a clear way and prefer to offer technical aspects. We often find comments with terms such as "nice", "valid", but also "inaccurate" or "cheap".

3. *Negative Sentiment*: Under this knot are categorized comments that exhale feelings contrary to the adv, containing words such as "scary", "horrible" and "I will not buy".

The results of this first analysis are reported below.

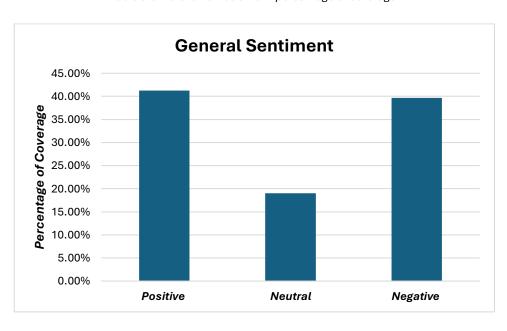
Table 3.5: Forever is Made Now General sentiment: number of references



Source: (Excel)

The comments are divided almost equally between positive and negative sentiment, with a small position that instead preferred not to go out and opted for a neutral position, appreciating the commercial without saying they were enthusiastic or fans. The difference is minimal, 26 comments or 41% of the total comments express positive feelings, 25 negative feelings, i.e. 39% of comments.

Table 3.6: Forever is Made Now: percentage of coverage.



The second analysis also in this case provides for an analysis of the sentiment related to the use of AI and therefore considers only those comments containing AI or artificial intelligence. Also in this case, three categories have been codified, which are as follows:

- 1. *Positive Impact*: Coding that categorizes comments that exhale positive feelings about the use of AI to make the Under Armour emotional commercial. Words such as "beautiful", "love" or "adore" are considered.
- 2. *Neutral Impact*: A category that includes those comments with a neutral value, which do not lean towards a judgment but are impartial.
- 3. *Negative Impact*: a category that contains those comments that exhale negative feelings and negative emotions for the use of AI. We find phrases with terms such as "horrible", "atop the use", "hallucinating" or "inappropriate".

A graphical display of the analysis results is displayed.

Use of Al Sentiment

18
16
14
12
10
8
6
4
2
0
Positive Neutral Negative

Table 3.7: Forever is Made Now Use of AI sentiment: number of references

Source: (Excel)

Unlike the previous spot, in this case the analysis of the sentiment in relation to the use of AI is slightly clearer. A difference can be observed between comments that are happy of the use of AI and the result obtained and those that consider the use of AI not good and wrong.

This difference is clear, but not so big, 38% for positive impact and about 30% for those related to negative impact, as in the case of the first commercial analyzed, that of BMW, so it is possible to

confirm what was previously asserted, that is, that the commercial and the use of AI to make it was generally appreciated but is not free from criticism and conflicting feelings, however, it cannot be said that the AI manages to break through as an emotional lever to convey the message that Under Armor wanted to convey.

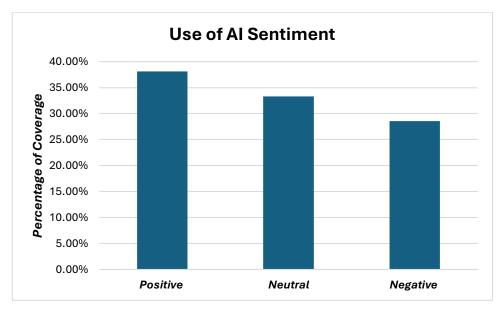


Table 3.8: Forever is Made Noe Use of Ai sentiment: percentage of coverage.

Source: (Excel)

# 3.5 Next steps

In this chapter, we have thoroughly examined semiotic theory applied to marketing, introducing essential ideas such as signs, symbols, visual and cultural codes, and their importance in the formation of meanings inside advertising campaigns. We explored how semiotics can be utilized to decode the implicit and explicit meanings included in selected commercials, focusing on BMW, , and Under Armour. We investigated how each visual and narrative element contributes to the development of brand identity and influences audience perceptions using systematic analysis and semiotic segmentation grids.

Next, we described the technique utilized to perform this research, including how the commercial sample was selected, and the types of analysis used. The semiotic analysis was supplemented by content analysis to quantify the audience's emotional reactions to the commercials, which was done using NVivo software to gather and analyze user comments on digital platforms. This mix of techniques has resulted in a more thorough knowledge of the emotional impact and perception of AI-powered advertising efforts.

We then explained the progress of the experiment, describing in detail how the analysis grids were applied to decode the signs and symbols present in the commercials, and how analysis of the reactions was conducted to collect data on the perceptions of the public. The results obtained provided a series of significant insights into the effectiveness of the use of AI in advertising campaigns and the influence of cultural and visual codes on user sentiment.

In the following chapter, we will present a detailed conclusion to this research, critically examining the findings to derive meaningful insights and valid managerial implications. We'll talk about how the findings can influence future marketing strategies, specifically the use of AI to create emotionally engaging and culturally relevant brand tales. In addition, ideas for future research will be presented, including suggestions for untapped areas and open topics that should be investigated further. Finally, we will explore the research's limitations, noting the methodological and contextual constraints that may have influenced the findings and suggesting improvements for future investigations.

# Conclusion: Discussion and Implications

### 4.1 Introduction

The following chapter focuses on the discussion and interpretation of the results obtained from the research carried out during this thesis, with particular reference to the semiotic and content analysis of the commercials selected and presented in the previous chapter. The main objective of this chapter is twofold: on the one hand, to critically interpret the results, placing them in the context of the existing literature and, on the other hand, to highlight the practical implications for marketing and business management deriving from these results. The following discussion will also include a reflection on the methodological limitations of the study, which may have influenced the results, and a proposal for future lines of research aimed at overcoming these limitations.

The analysis conducted has made it possible to highlight how the use of artificial intelligence (AI) in advertising contexts generates significant effects on the public, both emotionally and perceptually. The selected commercials, from sectors as diverse as automotive and sport, but all characterized by an evident emotional lever as the basis of communication, showed a sophisticated use of AI that goes beyond the simple technological tool, helping to shape the narrative and create a complex emotional experience for viewers. The decision to focus on these specific sectors has made it possible to explore different ways of using AI in advertising, with particular attention to the semiotic strategies used to influence the collective imagination.

The chapter therefore consists of several sections. It starts with a detailed interpretation of the results obtained from the various analyses conducted, followed by a critical analysis of the limits of the research, with particular attention to the methodological choices that may have influenced the results. Subsequently, the managerial implications will be discussed, outlining how the results of the study can inform and improve business strategies in the contemporary context, characterized by an increasing use of advanced technologies, especially AI.

Finally, some future prospects for the implementation of AI in marketing and advertising communication will be discussed, suggesting new paths of research and practical application, which can perhaps fill the limitations or enrich the research carried out, to obtain even more complete results and even deeper insights.

# 4.1.1 Brief Summary of the Results obtained

The results that emerged from the semiotic analysis and content analysis conducted on the three selected commercials highlight some fundamental dynamics regarding the use of artificial intelligence (AI) in contemporary advertising communication. Through the use of the segmentation grid and the Floch consumption valorization model, it was possible to thoroughly analyze the signs, symbols and visual codes present in the commercials, allowing us to understand how AI not only supports the construction of the message, but acts itself as an important narrative and symbolic element.

The content analysis, conducted on user comments on the videos of the commercials through natural language processing (NLP) tools, specifically the Nvivo software, has further highlighted how the public reacts emotionally to such content, offering a clear picture of the perceptions generated by the use of AI in different advertising contexts, also allowing us to understand the various themes of the reactions generated.

Firstly, BMW's "Make It Real" commercial, in which the figure of virtual influencer Lil Miquela appears as the protagonist together with the iX2 car, showed how AI can be used not only to arouse positive emotions related to innovation and technology, but also to establish a link between the digital and real worlds. The semiotic analysis highlighted the importance of visual and symbolic elements that recall the future, such as the use of cold colors and futuristic settings. Floch's valorization model revealed a strong presence of utopian and practical valorizations, in which AI is perceived not only as a means of improving technological efficiency, but as a symbol of progress and innovation. User comments on this advertisement, analyzed through NLP analysis tools, showed a predominantly positive response, with many interactions highlighting amazement and admiration for the brand's ability to combine technology and storytelling in an engaging and fascinating way.

Under Armour's "Forever is Made Now" commercial showed how AI can be used to enhance the narrative related to perseverance and improving athletic performance. The semiotic analysis revealed how the symbols of resilience and physical strength were enhanced by the use of AI techniques, which made it possible to personalize the visual experience and amplify the brand's motivational message. In Floch's valorization model, advertising is distinguished by a strong utopian component, in which perseverance and application to continuously improve oneself are an essential tool to achieve physical and mental perfection, as well as opening up to new discoveries and embracing innovation is the key to improving in aspects of life and work. Content analysis through Nvivo also confirmed a very positive response, with comments praising the message of inspiration and the brand's ability to

combine technology and sportiness effectively, although it is not to be deceived a large portion of the public who were disappointed by the use of AI as a tool for the realization of advertising, going to ignore the message it tries to convey.

Finally, the Under Armor commercial, The Ultimate Team Talk, is analyzed. the latter is analyzed according to semiotic methodology only, to deepen the use of AI in this specific segment, i.e. the sports marketing segment. In this case we have a different use of AI in a practical sense from what we have previously seen with Forever Is Made Now, but with similar purposes, a general positioning of Under Armour as an innovative brand, capable of being at the forefront and providing technologically advanced equipment that allows you to conquer the sporting peaks as well as the engine of victories represented by the cars represented. In this specific chaos, the use focuses on the creation of a script that allowed the staging of the commercial, generating through various forms of prompt, a discourse that aspires to be the definitive motivational discourse. The rendition emphasizes what is the enhancement and the ludic dimension but tries to lay the foundations for developing a narrative that allows a positioning of the brand consistent with the image it wants to convey of itself. In the following paragraphs we will dissect the results briefly presented in this section, to carry out an interpretation and make sense, in order to clarify what the research found.

# 4.2 Interpretation of Results

Based on semiotic and analysis of audience reactions, the interpretation of the data from the research on the advertisements under examination provides a clear and informative image of how artificial intelligence (AI) is employed in advertising campaigns to sway the opinions of viewers.

In particular, the use of AI proves to be central not only as a technical tool, but also as a narrative element that, thanks to semiotics and visual representation, helps to create an emotional bond with the audience. In the following pages we will try to interpret the various analyses carried out and the results obtained, to understand how these relate to the research question of the paper.

# 4.2.1 Interpretation of data based on existing research and theory

The interpretation of the data that emerged from semiotic analysis and the analysis of the comments follows the theoretical foundations of semiotics, with particular attention to segmentation techniques and the valorization model proposed by Jean-Marie Floch, as well as providing a deep understanding of the emotional perceptions of the public through the analysis of comments, i.e. a qualitative methodology.

### 4.2.1.1 Segmentation Grids: Interpretation

Through the use of segmentation grids, each commercial was broken down into individual narrative sequences that allowed for an in-depth analysis of the use of signs, symbols, colors, sounds and lighting. This segmentation revealed how visual and sound elements were carefully selected to convey specific emotions and meanings, both individually and in their co-existence.

In the case of the "Make It Real" commercial, the segmentation grid highlighted the strong emphasis placed on the use of Lil Miquela, a virtual influencer created entirely through AI, in particular his ability to recreate facial expressions comes from years of data interpretations on emotional reactions and expressions collected and sifted through by countless algorithms. This virtual character acts as a hallmark of the fusion between the real and digital worlds. The opening sequences of the commercial, which see Lil Miquela exploring both virtual and realistic landscapes, are dominated by cold colors and often artificial light that recall concepts of innovation and progress. This color choice helps to position BMW as a pioneering brand, embracing the latest technologies to offer its customers new and immersive experiences. The analysis of visual and textual codes revealed a mainly utopian and practical valorization, where AI is not only shown as a tool for innovation, but also as a symbol of a future in which the digital and the real blend harmoniously. The grid made it possible to identify, for example, how the final sequence, in which Lil Miquela experiences rain for the first time, represents a key moment of "humanization" of the AI, creating an emotional bond between the audience and the character.

Under Armour's "Forever is Made Now" commercial, on the other hand, used segmentation to showcase athletic performance and strengthen the brand's image through a narrative of strength and resilience generated through the aid of a mix of real and AI-generated footage. Sequences showing athlete Anthony Joshua in training, alternating with CGI scenes created by AI, combine real images with virtual elements, creating a unique visual experience that emphasizes dedication and determination.

The analysis highlighted the use of strong and contrasting lighting, with dark tones that enhance moments of difficulty and bright desks that symbolize overcoming challenges. This segmentation has highlighted a utopian enhancement in which dedication is seen as a tool that helps athletes overcome human limits, just as AI seems to be the new tool capable of transporting humanity into the new industrial era, creating a bridge between the present and the future.

### 4.2.1.2 Floch's Scheme

The application of Floc's valorization scheme offered a fundamental interpretative key to understanding how AI is perceived and represented in the three commercials. As already described in the previous chapter on several occasions, Floch distinguishes four modes of valorization: practical, utopian, critical and ludic, each of which represents a different approach to the representation of the product or technology.

The "Make It Real" ad primarily enhances AI in terms of the practical and utopian. Utopian valorization is evident in the representation of a future in which AI is not simply a tool, but a fundamental element of the real world, as demonstrated by the figure of Lil Miquela. This futuristic narrative reflects the idea of a world where technology improves everyday life, making previously unimaginable experiences possible. In parallel, the practical enhancement of AI emerges in the way it is used to improve the accuracy and quality of digital experiences, both in the advertising context and in the representation of the product (BMW iX2).

The "Forever is Made Now" commercial features a strong element of utopian valorization, in which AI celebrates perseverance and resilience as allies in the pursuit of athletic perfection. The use of AI to improve physical performance and personalize training reflects an optimistic view of technology, which allows athletes to push their limits and reach new heights. if continuous improvement and getting involved leads to obtaining better performance, overcoming limits and winning, the technological innovation that AI can represent the means for achieving future steps.

In the analysis of the commercial "The Ultimate Team Talk" through Floch's model, the predominant enhancement appears to be the utopian one. The commercial, in fact, leverages collective identity, team cohesion and the drive to overcome one's limits, elements that embody the ideal of personal fulfillment and belonging to a group, central themes of the motivational discourse generated by artificial intelligence. This utopian enhancement underscores the potential of AI to strengthen identification with existential values and create a deep emotional connection with the audience.

The use of artificial intelligence is not limited to a practical or critical function but is part of an emotional narrative that stimulates the public, showing how technology can be a tool to achieve higher ideals and strengthen brand identity.

### 4.2.1.3 Content Analysis: Analysis Through Comments

The analysis of the content of the commericals, offered further insights into the public's perception of the use of AI in advertising. The use of Natural Language Processing tools made it possible to

analyze the comments of viewers on digital platforms, in this case the selected platform is YouTube, providing an overview of the emotional reactions aroused by each of the commercials.

In the case of "Make It Real", the comments reflected a predominantly positive response, with numerous viewers expressing admiration for the commercial, sometimes even for the innovative use of AI the figure of Lil Miquela. The analysis of the comment section showed how the commercial was able to capture the viewer in most cases, attracting him into its narration with studied images and sounds, making it almost secondary to the fact that the protagonist was not a human figure but a car and a virtual entity which, however, over time comes to feel the sensation of being real. The mix of shots, partly artificial and partly real, certainly helped to better integrate the innovative technology of the protagonist. it can be said that the use of CGI elements combined with real images and a studied and perfectly matched sound clone has made it possible to elevate the communication and the message to be transmitted.

Finally, the "Forever is Made Now" commercial received enthusiastic comments, with many viewers highlighting the motivational power of the message and the effectiveness of AI in reinforcing the theme of athletic resilience, despite the fact that there are several comments that did not appreciate Under Armour's choice to use AI to develop the content of the commercial. The content analysis revealed an overall positive emotional response, with viewers interpreting AI as an element that elevates the advertising experience, making the message even more impactful and inspiring. However, a detachment that is never entirely clear should be recorded, on the contrary, which leads to reflection. Certainly, the mix of reality and AI also helped in this case, yet not as much as in the first commercial analyzed, making us reflect on the type of technology used and on how it probably integrates less than those used by BMW in the emotional narrative that the commercial wants to convey. Also, in this case the result is quite polarizing, and overall the result is achieved, but certainly the integrity, a fundamental value in sport, that the AI does not seem to represent and that could lead viewers to think that the Brand wants to travel the fastest road, instead of the longest and most difficult one, to get results.

It can therefore be argued that the use of AI in commercials that leverage the emotive component generates complex and deep emotional responses, shaping the public's perceptions in ways that are often significant but above all diversified depending on the context and objectives. A communication that leverages emotions such as that of the automotive sector, often linked to the theme of technology and innovation, seems to benefit from the mix used and the technologies used. Communication in sports marketing, on the other hand, seems to be a fertile ground as a whole, here emotionality reigns

supreme, it is the push for many of the spectators and artificial intelligence technologies seem to be able to enhance this lever, but it is presumable that a square has been found in terms of proportions, not everything must be left to AI if it does not integrate perfectly with the narrative going almost to sink its presence, as it happens in the first commercial, that perhaps the facial recognition technology used in the BMW commercial can be the answer in this sector as well? The Forever is Made Now commercial achieved the goal of understanding how AI can be used to personalize the advertising message in order to inspire and motivate the audience, that's for sure.

The trends that certainly emerge from this analysis are the ability to enrich the narrative, the ability to polarize the audience of viewers by generating strong and contrasting emotions and finally the possibility of customizing advertising content to improve not only targeting but also create more engaging and relevant experiences.

Overall, what emerges from the analysis of the viewers' reactions is that BMW has certainly managed to obtain a reaction in line with the expectations underlying the development of the commercial, through a perfect integration of AI with the traditional mechanics of commercial commercials. Under Armour in its spot instead fails in the same result, but this does not mean that the commercial is a failure or unsuccessful. As seen by the semiotic analysis, Under Armour's commercials more than BMW's push forward in terms of innovation, this impression is certainly found in the comments. However, the technologies chosen are still imperfect and the aesthetic result is less natural and homogeneous, resulting in a more diversified response.

# 4.3 Critical analysis and limitations of the study

# 4.3.1 Methodological Limits and Restrictions

The study's findings about the application of artificial intelligence (AI) in advertising communication were noteworthy and were based on the semiotic and content analysis of three advertisements. It is crucial to acknowledge the constraints and restrictions pertaining to the methodology that may have affected the ultimate outcomes, and the potential consequences these limitations may have on the analysis and understanding of the gathered data.

First, one of the study's main limitations is the corpus selection. Although the three chosen commercials—"Make It Real" from BMW, "Forever is Made Now" and "The Ultimate Team Talk" from Under Armour—offer a range of AI applications in different contexts (sports, and the automotive industry), the small number of commercials may not accurately reflect the full spectrum of AI uses in the advertising industry. This restriction becomes more important when we take into

account the vast and intricate applications of AI in various advertising settings, such those pertaining to fashion, food, or travel, which may provide a more comprehensive and varied knowledge of the technology's effects.

Furthermore, despite the use of segmentation grids and Floch's valorization model, which have attempted to structure and objectify the interpretative process, semiotic analysis itself provides a degree of subjectivity that cannot be entirely eradicated. Although the tools are robust, they are based on subjective and cultural interpretations that may change based on the researcher's experiences and the context in which they are utilized. The process of deciphering and analyzing symbols, visual codes, and signals may have been influenced by subjectivity, which could have limited the conclusions' generalizability.

Content analysis and ansalys of the reactions, although supported by natural language processing (NLP) tools, can also face difficulties in correctly interpreting emotions expressed in online comments. In particular, sarcastic, ironic or ambiguous expressions may not be adequately recognized by the algorithms, which could distort the general sentiment that emerged from the comments collected. In addition, the data collected comes from digital platforms such as YouTube, which means that the audience represented is limited to active users on these platforms and may not reflect the entirety of the audience that has seen the commercials, especially if we consider that in the first case it is a commercial also broadcast through channels such as television.

Another significant limitation is the absence of a longitudinal comparison. The study is based on a detailed analysis of commercials and reactions to them, but does not take into account the evolution of audience perceptions of the use of AI over time. Attitudes toward technology, particularly AI, can change rapidly in response to cultural, social, and technological events, and a broader study over time could offer a more dynamic and nuanced view.

## 4.3.2 Potential Sources of Bias in Results

Bias sources may surface at various points during the investigation, impacting the findings and recommendations made. The commercial sample selection process is one of the primary causes of bias. The ads selected for examination, as previously stated, pertain to certain industries and could not be transferable to other marketing domains. This may have led to the introduction of industry bias, with the results disproportionately reflecting the dynamics of AI use in highly specialized contexts like politics, sports, and the automotive industry, but not in other important industries like fashion or entertainment, where AI may be applied in other ways.

Another bias could arise from the nature of the comments reviewed as part of the analysis of reactions. Online comments are frequently made by a certain segment of the audience, particularly younger, more active social media users, who may have more positive or negative sentiments regarding AI than other, less represented audiences. This could have distorted the overall representation of sentiment, making it more difficult to make broad conclusions about AI acceptability in the advertising environment.

In addition, the manner in which comments were gathered may have added prejudice. Not all comments left on the commercial videos were included in the analysis; comments deemed irrelevant or spam were deleted, which may have limited the diversity of points of view collected. Automated comment collecting using scraping technologies might bring flaws into the capture process, impacting the accuracy of the data being evaluated.

Finally, there is a potential interpretive bias associated with semiotic analysis itself. Semiotic analysis, as mentioned, however structured, is an intrinsically interpretative process and subject to cultural and personal influences of the researcher. Although recognized theoretical models have been used to mitigate this risk, there remains the possibility that the results partly reflect the subjective perspectives of the researcher rather than offering an objective and neutral picture.

# 4.3.3 Limitations related to the sample and methods used

One of the most significant issues of this study is the limited sample size. As previously stated, while the sample of three advertisements was carefully picked to demonstrate a diversity of AI applications, it cannot be regarded fully representative of the worldwide advertising environment. The decision to analyze commercials from three distinct sectors (automotive, politics, and sports) provides a solid foundation for the analysis, but as previously stated, it raises the question of how AI can be used in other relevant sectors, such as entertainment, tourism, or fashion, which frequently use the emotional component as a lever to elicit a reaction from the public, potentially yielding very different results. In addition, the methodological approach adopted, based mainly on a semiotic qualitative analysis and content analysis, also has some limitations. Semiotic analysis is a powerful tool for decoding the meaning of signs and symbols used in commercials, but its interpretive nature makes it difficult to objectively and quantitatively measure the impact of AI. Integrating more quantitative approaches, such as surveys or controlled experiments with a large sample of viewers, could offer a more objective and measurable view of the effectiveness of AI in advertising.

# 4.4 Managerial Implications

### 4.4.1 Application of the Results in the Managerial Context

The analysis of the commercials selected for this study provides important insights into how artificial intelligence (AI) can be used not only to improve advertising communication, but also to profoundly influence public perceptions. These findings offer a range of practical applications for marketers and businesses looking to integrate AI into their advertising campaigns.

In particular, the study reveals how AI may be utilized to develop new and appealing advertising tales. In the example of BMW, the company's deployment of a virtual influencer such as Lil Miquela has improved the brand's reputation as a leader in the technology sector and forged an emotional bond with a younger, tech-savvy audience. This implies that businesses aiming to establish themselves as leaders in innovation might use AI to produce immersive, interactive experiences that captivate viewers.

The key to the management application here applies in incorporating AI as part of the brand narrative, employing it not solely to improve the efficiency or accuracy of marketing, but to represent an added value that differentiates the brand from competitors.

For companies operating in highly competitive and dynamic contexts, such as the sports sector represented by Under Armour, AI offers the possibility of personalizing advertising content, creating unique and tailored experiences for viewers.

Under Armour has been able to enhance its emotional bond with its target demographic, which is primarily comprised of athletes and fitness aficionados, by utilizing artificial intelligence (AI) to evaluate athlete data and create customized stories. The results of this study indicate that businesses can use AI-powered marketing techniques to improve audience engagement, ad campaign efficacy, and message tailoring.

Effectively managing AI-based insights can lead to increased customer loyalty and a deeper connection between brands and consumers, creating strong brand loyalty.

From the high personalization capacity of AI we can derive a further advantage in managerial terms, in addition to the ability to generate debate and ignite the emotional and communicative levers that make up the messages to be conveyed, i.e. the possibility of segmenting the market even more efficiently for different market niches.

Finally, a practical tip for companies is to invest in in-house training to fully understand the potential of AI in marketing and advertising. Technological evolution requires companies to stay up to date on

the new possibilities offered by artificial intelligence and to form internal teams capable of using these tools strategically, without losing sight of the ethical implications and privacy protection.

# 4.4.2 Adoptable strategies based on the results

The analysis's findings present a wealth of possibilities for the deliberate use of artificial intelligence (AI) in marketing initiatives. It is possible to outline several specific strategies that managers and marketers can implement in order to maximize the effectiveness of their communications while simultaneously maintaining an ethical and responsible approach, based on the evidence that emerged from the Republican Party, BMW, and Under Armour commercials. The following suggestions are based on the best practices that have been found and can be modified to fit various situations while taking the unique requirements of the target market and industry into consideration:

- 1. Integrating AI as an integral part of the brand narrative: One of the main lessons learned from the analysis of BMW's "Make It Real" commercial is the importance of treating AI not only as a technology at the service of advertising production, but as a real narrative element that enriches the history of the brand. In this case, the virtual influencer Lil Miquela is not just a technological "gadget", but is a symbol of innovation that reflects the values and vision of the brand. This suggests that companies, especially those operating in tech-intensive industries, should look to integrate AI in a way that is consistent with their brand identity. Integrating AI as part of storytelling is not simply about employing virtual characters or creating digital environments, but rather about using technology to express core brand values. To avoid AI being seen as a cheap trick, there must be consistency between its use and the broader brand messaging. Companies have to consider regarding how AI may help them achieve their objectives and how it might advantage customers. It is strongly recommended that AI be understood as an essential component of the brand's value proposition, rather than merely an ephemeral or decorative aspect.
- 2. Using AI to customize contents: Another key recommendation that emerged from the analysis of Under Armour's "Forever is Made Now" commercial is the enormous potential of AI in personalizing ad experiences. The ability to analyze consumer data and create content tailored to their needs and preferences is one of the main practical applications of AI in modern marketing. In this case, Under Armour leveraged AI to create a powerful narrative where athletes and their performance are exalted, reinforcing the brand's motivational and resilience message. the ability to analyze data in large quantities and at immediate AI speeds allows you to obtain insights that allow greater personalization. Companies may leverage this technique

by employing AI to thoroughly investigate customer preferences and produce tailored messaging that directly address their desires and goals. AI enables the creation of highly targeted advertising campaigns that are flexible enough to adjust to the unique requirements of various audiences through the gathering and analysis of behavioral data. This strategy raises the relevancy of the advertising message and raises audience engagement, which raises the chance of conversion. Personalization, however, demands meticulous and intentional management of consumer data. Businesses need to make sure that the data they gather is handled transparently and in accordance with privacy laws, avoiding invasive strategies that can erode consumer confidence. Given this, artificial intelligence (AI) presents a wealth of opportunities, but it also calls for the ethical and responsible treatment of personal data.

- 3. Balancing AI efficacy and ethical considerations: the use of AI in the commercials highlights another important strategic consideration for marketers: the use of AI to manipulate audience emotions can be effective, but it presents significant risks in terms of public perception and corporate reputation. AI allows you to create powerful visual images and scenarios, that can elicit intense emotional reactions. However, the use of such techniques can raise ethical questions, especially when they are used to manipulate the public through fears and anxieties. Marketing professionals need to consider carefully regarding the moral ramifications of employing AI in their campaigns. While AI has the ability to increase the emotional impact of commercials, businesses must be mindful of the potential drawbacks of using technology in an unethical manner. Campaigns must, in particular, strike a balance between their ability to persuade and their respect for the message's integrity and consumer confidence. Utilizing AI to produce deceptive or manipulative visual content could have unintended consequences that harm a company's reputation and jeopardize its relationships with clients. Companies should take an ethical and responsible approach to the use of AI, ensuring that the messages they create are honest, transparent, and respectful of the public. In order to make it evident to the public how and why AI is utilized in advertising campaigns, it is also essential to implement transparency principles in communication. While improper use of AI can permanently harm a brand's reputation, ethical and proper use of the technology may enhance brand credibility and trust.
- 4. Continuous innovation through AI while maintaining the focus on consumers: Finally, one of the most relevant lessons that emerges from this analysis is the importance of constantly innovating in advertising strategies using AI, but without ever losing sight of the primary need

of the consumer. AI offers almost limitless opportunities to experiment with new forms of storytelling, personalized content, and immersive interactions, but all of these innovations must have as their ultimate goal the improvement of the consumer experience. AI adoption should never become an end in itself, but must always be driven by the desire to create real value for the public. The ability to understand consumer needs and expectations, through data analysis and content personalization, is essential to ensure the success of AI-based advertising campaigns, today and in the future. Companies that are able to continuously innovate while keeping the consumer at the center of their strategies will be more likely to gain a sustainable competitive advantage in the long term, leveraging the enormous potential of a tool that is destined to start a revolution.

The results obtained offer valuable insights that can provide a possible direction for the more efficient use of AI for the development of advertising strategies, in order to maximize the benefits that AI offers and obtain emotional feedback and more, from consumers and viewers.

# 4.5 Future Research Perspective

#### 4.5.1 Potential Future Researches

The results of the analysis suggest that the field of use of artificial intelligence (AI) in advertising campaigns is constantly evolving, and further research is necessary to fully understand how it affects communication dynamics and customers. Further studies may take several paths, building on the findings to investigate novel topics and perspectives not covered in this work. The necessity to explore a larger variety of industrial sectors stands out among the possible directions for future research in order to comprehend how AI can impact contexts other than those that have been examined (automotive, sports, and politics). Analyzing the efficacy of AI in the fashion, travel, or entertainment sectors, for instance, would be beneficial as these industries can employ various forms of narrative and consumer interaction than the advertisements under study. Diversifying study samples is a key step in gaining a broader view of the impact of AI in advertising campaigns. It is essential to include not only different industries, but also geographically and culturally diverse markets, to understand how AI influences perceptions in different cultural contexts.

Another potential line of research involves investigating the long-term effects of AI on public perceptions. The analysis carried out is based on immediate reactions to commercials, but does not examine how the continued use of AI can influence perceptions of the brand and the product over time. Longitudinal studies could explore whether the repeated use of AI in advertising campaigns

leads to greater consumer acceptance and familiarity, or whether saturation or fatigue effects emerge with AI-based technologies.

The role of ethics in the application of AI to advertising is another crucial subject to investigate. Future studies should examine the ethical side in greater detail.

Another recommended area of research concerns the integration of quantitative analysis methodologies. If the semiotic and the analysis of the comments, with the support of NVivo, used in this study made it possible to thoroughly explore the communication dynamics and emotional reactions of the public, future studies could be enriched with quantitative tools such as surveys, to measure the effectiveness of AI in improving the performance of advertising campaigns in a more objective and systematic way.

The combination of quantitative and qualitative methodologies would make it possible to broaden the generalizability of the results and to go deeper, in an attempt to find a reason and motivation for the answers and results obtained.

The use of AI upstream of the script creation process prompts a very important question that should be explored with further study: what tasks can truly be entrusted to machines? Or better: what part of humanity are we willing to surrender to machines? While the use of AI for generating visual content, with its capacity to create awe-inspiring imagery, is somehow accepted, the delegation of speech-based tasks, particularly those that require human-like emotional expression to motivate or inspire, remains a subject of debate. Is it really necessary to delegate an action with such important pathemic effects to artificial intelligence?

Another question, that arises spontaneously is are we really ready as an audience to use AI for marketing? The BMW commercial would suggest yes but the subject represented in virtual is among the most similar to the hesitant man, if we had become a different being we would have obtained similar results? Does the creation of images always have a positive effect if we have figures inside that we consider as close as people? probably their faction has a considerable specific weight. Again, if we delegated such creative activities, such as the creation of copy, in the long run, what effects would it produce? There are many paths that, starting from the results obtained, can be decided to take.

### 4.6 Conclusion

The analysis conducted within this study made it possible to explore in depth the impact of artificial intelligence (AI) on advertising campaigns and user sentiment. Through the use of semiotics and

content analysis, it was possible to highlight how AI is not only a technological tool, but a central element in the construction of the advertising message and in the modulation of the public's perceptions. The three selected commercials were significant examples of how AI can be used to elicit complex and differentiated emotional responses.

First of all, it's now evident that AI has a powerful ability to shape people's perceptions. The BMW ad offered a futuristic and inventive image of the company by showcasing how it is possible to develop a narrative that blends the real world with the digital one through the usage of virtual influencer Lil Miquela. The public's reactions to this application of AI have mostly been ones of amazement and awe, which has strengthened the link between the brand and the concept of cutting-edge technology. In this context, semiotics has emphasized how the selection of symbols and visual codes has been useful in creating an intriguing and utopian future vision, highlighting the importance of AI as a tool to materialize new possibilities.

"Forever is Made Now" advertisement from Under Armour showed how AI can be utilized to further a good message of resiliency and overcoming obstacles. The public's emotional response to the employment of AI in motivational storytelling was overwhelmingly favorable, according to the analysis. Semiotics demonstrated how the brand was associated with the virtues of tenacity and inner strength through the employment of symbols associated with time and effort, which made the message extremely potent.

The adaptability of AI in evoking various emotional reactions based on the setting and campaign objectives is among the most intriguing findings of this study. AI is not simply a way to make ads more technically sounding, but it also develops into a genuine story component that has the power to dramatically alter public opinion. These findings have a wide range of consequences. Marketers can, on the one hand, use AI to develop more persuasive ads that speak to the values and emotions of their target market. However, the application of AI presents significant ethical issues.

In conclusion, the study confirms that artificial intelligence represents a crucial resource for the future of advertising but requires a conscious and responsible approach. Al's ability to influence public sentiment, both positively and negatively, requires marketers and companies to think carefully about how to use this technology, balancing communicative effectiveness with ethical considerations and transparency towards the consumer. As a famous 1994 Pirelli advertising campaign, developed by the Young & Rubicam agency, quoted, "Power is nothing without control".

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