

THE IMPLEMENTATION OF AI IN MARKETING



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THE IMPLEMENTATION OF AI IN MARKETING

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Abstract

The implementation of technology in all industries resulting from the digital revolution has shaken up companies' focus, aim, and way of operating. Marketing has reacted to this revolution by shifting from traditional to digital and is going one step further by also incorporating most modern technologies, known as "the next tech". Artificial Intelligence is one of these technologies that is helping companies to improve their efficiency and results. Among the benefits we encounter are the automatization of processes and the analysis of Big Data that help marketers predict and understand consumer behavior to enhance the customer experience. Along with the digital tools, the flywheel model and the 6C's of customer motivation are the backbone of the new customer-centric approach, guiding Marketing Technology and enhancing the level of personalization that AI has enabled.

Keywords: *Marketing Technology, AI Marketing, Marketing personalization, Marketing 5.0, Artificial Intelligence*

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1. INTRODUCTION

1.1 Background

The Digital Revolution in the mid-late 20th century marked the beginning of the Information Age and Marketing 2.0. It was “the change from analog, mechanical, and electronic technology to digital technology”. Traditionally, companies were focused on reaching the largest number of people possible, using batch production and mass marketing, without segmenting the market. The introduction of digital technology drove the transition to Marketing 2.0, which provided companies with the necessary tools to get better insights into their customers and engage with them online. Artificial Intelligence goes even further by improving operational efficiency and customer experience, saving time to marketers, and driving conversions. Some uses include media buying (programmatic bidding), real-time personalization (ex. Netflix, Spotify recommendations), and natural language processing (ex. tracking social media posts). Essentially, it is a better understanding of customer behavior to improve the relationships with them. The predictions show that around 30% of data analysts will be replaced by AI in the following years and it will continue to expand, automatize, and improve many existing processes.

1.2 Problematization

Although AI was considered and defined during the 20th century, its implementation in marketing did not occur until the 21st. Most marketers use it for automating tasks so they can use their time in more complex matters. However, some concerns arise when working with machines. First, AI tools operate and are trained with data, so if data are wrong, results obtained with the use of AI will also be wrong. In the same vein, data can be human biased (not all population considered) or statistical biased (data varies from the population sampling), providing faulty outcomes. Second, the automation of tasks relies on algorithms, and the more we rely on them, the highest the “algorithmization” governance.

Third, AI is substituting many existent jobs that require humans to perform repetitive tasks, and people are apprehensive about robots provoking higher rates of unemployment.

1.3 Goal setting

The main objective of this thesis is to analyze and explain the evolution of marketing, as a consequence of the digital transformation, and the impact that the adoption of new technologies causes. Specifically, the impact and evolution of Artificial intelligence (AI).

We have also established some specific objectives:

- Introducing the modern marketing technologies and determining where AI enhances each of them.
- Identifying different uses of AI in marketing and the consequences of its adoption.
- Understanding how AI can enhance the customer experience following the customer customer-centric approach and its connection with the 6C's of customer motivation and the flywheel model on MarTech.
- Analyzing how companies are implementing AI and the objectives they hope to achieve with it.

2. METHODOLOGY

2.1. Structure of the TFG

This dissertation is divided into two separated but linked sections, the literature review and the practical part, and ends with a summary of both sections in the conclusion.

The literature review starts with an introduction to marketing, explaining the transition from traditional marketing to digital, and the evolution of marketing according to Kotler until the most modern stage, Marketing 5.0. Subsequently, it explains the definition of Marketing Technology, the tools it provides, and the trends in brands of all industries currently using it. Then, it expounds on the customer-centric approach and the emphasis on customization and hyper-personalization, showcasing how the flywheel model and the 6C's of customer motivation act as major driving forces. AI is introduced with the paths of AI history and relevant events in marketing. Lastly, a 5P's framework for organizing marketing AI technologies is displayed and some of the current uses of AI in marketing are discussed.

In the practical part, we present two companies that are successfully applying AI in their business model and exhibit the AI-enabled activities they are using inside the correspondent stage of the flywheel model.

2.2 Methodological approach

Given the novelty of the subject matter, it has been complicated to get access to traditional sources of information. This field is evolving at a considerably fast speed but still not many studies have been performed with its implementation in marketing. Because of this, most of the resources are books, articles, and blogs written by well-known marketers such as Philip Kotler, and experts in AI Marketing (Christopher S. Penn) and MarTech (Scott Brinker).

In the practical part, some obstacles have prevented us from conducting interviews with professionals working with AI:

1. Privacy. AI is an important strategic asset for companies, and they want to use it to get better results and obtain a competitive advantage in the market; they need to keep it secret.
2. Accessibility. Technology is used every day in greater scale, but newest technologies can still be expensive and hard to understand. Untrained employees in the technology and the investment it entails makes the number of companies using it is still relatively low.
3. Quality. Medium and small companies perform similar activities with the use of AI. Nevertheless, these activities are presented in the literature review section and do not provide any innovation. Thus, the need to analyze big corporations that can highly invest in this tool and deliver innovative applications.

3. LITERATURE REVIEW

3.1 Marketing Technology

3.1.1 *From Marketing 1.0 to Marketing 4.0*

According to the father of marketing, Philip Kotler, and Gary Armstrong, “marketing... [is] the process by which companies engage customers, build strong customer relationships and create customer value in order to capture value from customers in return” (2017, p. 29) with the purpose of attracting new customers to the company while maintaining the company’s current customer base. The Chartered Institute of Marketing (CIM) defines it as “the management process responsible for identifying, anticipating, and satisfying customer requirements profitably” (CIM, 2015). These two definitions show that nowadays marketing revolves around satisfying customers’ needs and creating customer value, however, customers have not always been at the center of marketing. The American Marketing Association (AMA) provided its first definition of marketing in 1985 and two more in the following 30 years to mend some details (See Table 1). The first one considered marketing to be used for reaching individual and organizational goals. Later on, in 2004, they specified the beneficiaries as the organization and its stakeholders, and in 2007, they broadened the beneficiaries of marketing, starting with the company and its stakeholders, which includes employees, customers, and shareholders, to society at large. AMA’s definition considers all stakeholders important when thinking of marketing while the CIM and Kotler put more focus on the client.

Table 1: The Evolution of the Definition of Marketing by AMA

Author	Definition
AMA, 1985	“The process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational goals.”
AMA, 2004	“Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders.”
AMA, 2007 (lastly revised and approved in 2017)	“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”

Source: Prepared by the author based on the article The American Marketing Association's New Definition of Marketing: Perspective and Commentary on the 2007 Revision by G.T. Gundlach and W.L. Wilkie published in 2009. (Gundlach & Wilkie, 2009).

In the 1950s and 1960s, marketing came after production. Companies would design and create a product focusing on its quality and presentation, allocating all their resources to improve them, as they considered high-quality products would be easily sold, not caring about getting a higher number of sales, which would have meant understanding their customer's needs (Suárez-Cousillas, 2018). With the evolution of marketing, production was sidelined, and companies started to care about consumers' needs, developing techniques for customer segmentation and strategies to reach, attract, and retain them.

Most people think marketing is all about selling and advertising, and actually, that was the main goal at the marketing 1.0 stage, but currently, those two components are only a small part of the whole marketing mix. Marketing has evolved and adapted to the modern times. Philip Kotler differentiates five stages of Marketing in its books *Marketing 3.0: From Products to Customers to the Human Spirit* (2010), where he navigates from Marketing 1.0 to 3.0, *Marketing 4.0: Moving from Traditional to Digital* (2016), and *Marketing 5.0: Technology for Humanity* (2021).

Table 2: The Evolution of Marketing from 1.0 to 5.0

	Marketing 1.0	Marketing 2.0	Marketing 3.0	Marketing 4.0	Marketing 5.0
Origin	1950s	1980s	2000s	2010s	2020s
Focus	Product-centric	Consumer-centric	Human-centric, values driven	Moving from Traditional to Digital	Technology for Humanity
Enabling forces	Industrial Revolution	Information technology, Internet	New wave technology and globalization	Digital Marketing	Next technologies and rise of Gens Z and Alpha
Aim	Customer satisfaction, sell products	Customer retention	Build a better world	Predict and identify trends	Improve humans' lives and propel tech advancement
Key marketing concept	Product development, life-cycle management	Micro-segmentation, Web 2.0, social media	Company's mission, vision, and values	Content creation	Enhance customer journey value
Perception of the market	Mass buyers with physical needs	Intelligent well-informed consumers with mind and heart	Whole human with mind, heart, and spirit	Social human	Tech-savvy, changing behavior
Value proposition	Intellectual	Intellectual and emotional	Intellectual, emotional, and spiritual	Communication and trust	Personalization
Communication with consumers	Unidirectional, mass communication	Bidirectional	Multidirectional, relationships and cooperation	Omni-channel, instantaneous	Omni-channel, customized
Examples of brands	Bic, Ford (Model T)	Scottex, Geico, Volvo	Timberland, Lush, IKEA, The Walt Disney Co.	Amazon	Spotify, Netflix

Source: Prepared by the author based on the books: Marketing 3.0 From Products to Customers to Human Spirit (Kotler et al., 2010), Marketing 4.0: Moving from Traditional to Digital (Kotler et al., 2017), and Marketing 5.0: Technology for Humanity (Kotler et al., 2021).

Marketing 1.0 origins are in the Production era, with the enhanced mass production after the Industrial Revolution. During this period, consumers only knew the information about products advertised on ads or obtained through their circle mouth-to-mouth. Companies focused their attention on designing products and acquiring the necessary industrial machinery to meet the high demand of the market, which at this time exceeded the supply. Products were very simple and targeted to a mass market so they could produce on large scale, decreasing production costs and selling products at a lower price (Kotler et al., 2010). The

main example of Marketing 1.0 was Henry Ford with its model T, mass-produced and sold at a cheap price only in black for many years. There were more customers asking for products than companies in each industry that could produce them. This situation was beneficial for the corporations, as they only had to make themselves seen and advertise what they were offering because the competition was basically non-existent. Companies did not care about the perception of the buyer and used mass advertising through traditional media, first with print advertisements, and later with radio and TV commercials ads. The objective of this strategy was to raise awareness of the brand, create the brand image, and present the characteristics of the products reaching the biggest amount of people possible. The communication between the two interlocutors was unidirectional and there were many promotions inciting customers to buy such as “2 for 1”, “lay away plans”, “rebates”, and “today only discounts”. Nowadays, Marketing 1.0 is used by companies with slow growth or very specialized, but it is less used every day being substituted by most modern approaches.

Subsequently, the number of existing companies increased, and so did the competition. Consumers were well informed and started to compare different offers before making a decision. Now they were the ones determining the value of the product. Companies wanted to satisfy and retain them, so they shifted their focus from the product to the consumers. Marketers performed segmentation, targeting, and positioning. The products were designed to a specific target market and companies distinctly defined their positioning to include the right features at the selected price and worked to build strong relationships with their customers, to not only satisfy them but retain them (Kotler et al., 2010). This was the era of **Marketing 2.0**. The arrival of the Web 2.0 allowed users to communicate with each other, overpassing the Web 1.0 where they could only search online. Other things that appeared during this time and facilitated communication were the creation of blogs and social media platforms. In order to understand customers and their needs, companies started to perform market research in the 1930s through

primary, qualitative, and quantitative research, with a predominance of focus groups. Nevertheless, researchers found discrepancies between people's opinions and what they bought, so in the 1940s, Ernest Dichter came up with a new form of consumer research, Motivational Research (Kierlanczyk, 2016). He believed customer's kept their desires hidden and purchased items not for their purpose, but for their symbolic meaning. Companies realized consumers had different tastes so they started segmenting the market and designing specific products for each target market. Marketing transitioned from its functional proposition, targeting only the minds of the consumer, to also including emotions and targeting their hearts. One example of the emotional incorporation is Volvo and its positioning as the brand offering the safest car. Bidirectional communication replaced unidirectional as companies provided information to the customer and gathered its insights and feedback to refine the product and their strategies. It was all about creating content and building relationships. In this new era, not only do companies use traditional media, but they also add digital media to communicate with their clients. Most companies in the XXI century used this type of marketing. Indeed, more than half of the CEOs believe they create value for their customers (PwC, 2016a).

Marketing 3.0 started driven by the new wave of technology, globalization, and the rise of a creative society, allowing instant interaction and connection with people from all around the world (Kotler, Hermawan, & Setiawan, Marketing 3.0 From Products to Customers to Human Spirit, 2010). It follows the line of Marketing 2.0 focusing on the consumer, but it goes even further by considering them as whole humans with mind, heart, and spirit, whose needs and wants must always be listened to. In Marketing 2.0, customers are "passive targets of marketing campaigns" (Kotler, Hermawan, & Setiawan, Marketing 3.0 From Products to Customers to Human Spirit, 2010) but in Marketing 3.0, customers care about the companies mission, vision, and values. They want the story behind the brand, not only to buy a product that satisfies their physical needs but a spiritual fulfillment. Marketing 3.0 emerged around the global financial crisis and financial scandals,

leading customers not to trust corporations whose only focus was the revenue. Therefore, marketing needs to create products, services, and company cultures that reflect and embrace human values. Companies in the 3.0 stage differentiate each other from their values, the new focus, and they care about their customers' thoughts on matters that can at first look unrelated to the business, such as the environment and the society. Most companies would use these insights to connect with their customers on a more personal level. Companies still care about the customers and want to retain and satisfy them, but they had the goal of making the world a better place. It is the focus on society at large, reflected in the 2008 AMA definition of marketing previously mentioned. Owing to the technological developments, communication takes place in multiple channels, such as chats, being now multidirectional. Marketing 3.0 marks the end of the traditional marketing era and it is very relevant for the generations that genuinely care about society, specifically Generation X (born between 1965-1980), Generation Y or Millennials (1981-1996), and Generation Z (1997-2009), which push companies in their efforts of making a social impact in their industries (Kotler et al., 2021).

All countries have communication in the blink of an eye and the globalization already existent in the Marketing 3.0 is here to stay. The introduction of electronic commerce (e-commerce), and the emergence of new technologies, marked a new era. Mixing the best of traditional marketing and digital marketing, **Marketing 4.0** arises (Kotler, Kartajaya, & Setiawan, Marketing 4.0: Moving from Traditional to Digital., 2017). Kotler differentiates digital marketing from marketing in the digital world. Digital marketing "refers to any marketing methods conducted through electronic devices" (American Marketing Association (AMA), n.d.) while marketing in the digital world needs an omnichannel, all channels available to the consumer are connected, to reach the desired target market both physically (offline) and digitally (online) (Kotler et al., 2021). The goal of this combination is to build customer engagement and win customer advocacy. The client is the central spotlight of the organization and thanks to the tools designed with the evolution of

technology, products and services have become more personalized. Consumers are now in full control of the buying process. They have access to most of the information (products, social responsibility, ratings, values) about any company online, enabling them to compare different options and share experiences with other consumers. Earning customers' trust and loyalty becomes the new goal of companies in an overly crowded world with customers asking for immediate responses and solutions. Companies need to focus on customer satisfaction because, together with brand identity and brand image, is one of the most significant factors affecting customer's purchase intention (Dash, Kiefer, & Paul, 2021). The merger of Big Data and Analytics provides a new opportunity for companies to obtain valuable information about their current and prospective customers through social media, IoT, and wearable products. Big Data is characterized for its three variables: volume, velocity, and variety; also known as the 3 Vs. Information compiled by companies using Big Data also meets these characteristics, making it extremely useful for them to gather vast amounts of information and improve their targeting. It is not as easy as in the XX century to reach a broad audience and people are tired of seeing advertising not related to their interests in the TV, so they turn to technology and skip them by streaming or downloading their favorite shows online (F. Nunes & Jeffrey, Winter 2007). According to David Ogilvy (1963, p. 114), "the purpose of a commercial is not to entertain the viewer, but to sell him", and it is important to notice that ad appreciation, ad liking, and ad purchase intention follow the inverted U-curve pattern (García-Madariaga, Moya, Recuero, & Blasco, 2020). The market is more inclusive as a consequence of globalization. People can connect and collaborate with other people without geographic frontiers, and so do brands. In the ever-changing market, screens have become a fundamental part of the population, both for working and leisure. Many people do online shopping and share their experiences online. Customers are paying attention to brands' communications online and the buying process has become more social with influencers and online reviews. Some customers do not care about others' opinions or advertisements, so

Kotler, Hermawan, & Setiawan (Marketing 4.0: Moving from Traditional to Digital, 2017) differentiate three lucrative markets that companies need to target for increased probability of getting advocacy. The first one is the youth because they are the trend setters and the game-changers. They try and accept new products that they later introduce to older generations. The second is women because they usually do in-depth analysis and research of the product before buying it and they act as the gatekeeper for any family targeted product. The last one is netizens, citizens of the internet, and they are highly influential because they are savvy in technology and are extremely connected with others. Although this group (YWN) has specific characteristics that make it hard to impress them, once brands do, they will have acquired the most loyal advocates and the most influential segments of the digital economy.

Marketing 5.0 emerges as a consequence of the fast digitalization in the world, even more pronounced with the COVID-19 pandemic, which forced businesses to drastically accelerate the digital transformation (Soto-Acosta, 2020). In order to adapt to changing customer behaviors and new trends, companies applying Marketing 5.0 must be data-driven and have corporate agility (Kotler et al. 2021). This new concept maintains the human-centricity of Marketing 3.0 and the technological perspective of Marketing 4.0 (Kotler et al., 2021). Marketing 5.0 is the use of technologies that simulate the capabilities of human marketers to discover insights and provide customers with the right content; it's data-driven marketing. The technologies used are called "the next tech" and include: artificial intelligence (AI), natural language processing (NLP), sensors, robotics, augmented reality (AR), virtual reality (VR), Internet of Things (IoT), and blockchain. These technologies will be defined in section 3.1.4 Tools. The market segmentation that started in Marketing 2.0 is more relevant in this era than ever before. Indeed, Marketing 5.0 enables marketers to deliver customized marketing at the point of sale and improve customers' experience. This new marketing faces three challenges: "generation gap, prosperity polarization, and the digital divide" (Kotler

et al., 2021). The first challenge exposes companies to a market with 5 differentiated generations with unique preferences, expectations, values, and lifestyles that influence their buying behaviors, as such, marketers need to understand their specific needs and even consider multi-generational marketing, which means appealing to the specific needs of more than one generational group (Williams & Page, 2011). The second one confronts them with unbalanced wealth distribution in an M-shape, resulting in an almost non-existent medium-price market and two large markets in the extremes, a low-price and a luxurious high-price (Zucman, 2019). As well as low accessibility to innovative technology because only affluent consumers can afford it. And the third one deals with concerns about digitalization substituting some jobs and violating privacy. Businesses need to work on solving the three to stay afloat in this new period. Despite the use of technology to enhance the customer journey, which should always follow the marketer's strategy, the main focus of Marketing 5.0 is still humanity (Kotler et al., 2021).

Table 3: Marketing 5.0 challenges and proposed strategies

Challenge	Goal	Strategy
Generation Gap	Understanding the current five generations and personalizing at an individual level	Earn the trust of Generation Z and Generation Alpha
Prosperity polarization	Enabling technology accessibility to everybody	Invest in society through inclusive and sustainable marketing to redistribute wealth
Digital divide	Become a fully digital society	Promote a more digital market driven by customers' demands and showcase benefits of tech

Source: Prepared by the author based on the book Marketing 5.0: Technology for Humanity by Kotler, Kartajaya, & Setiawan published in 2021. (Kotler et al., 2021).

3.1.2 What is Marketing Technology?

Digital marketing is any method of marketing performed through an electronic device or the internet to leverage online content and digital channels (AMA, n.d.). The term was first used in the 1990s when the first search engine (Archie) was launched, and it was born as a result of the coming of the internet, the development of the Web 1.0 platform, and the emergence of digital technology. The Web 1.0 allowed users to search for information but not to share it and through the years it progressed to the current Web 5.0.

Digital marketing has become a key resource for many companies allowing them to reach and attract their desired target market and has many benefits when compared to traditional marketing. Indeed, it accounted for almost 80% of the marketing channels budget in 2020 (Gartner, 2020). The main difference between the two is the communication channel used. Traditional marketing is mostly used in television, radio, or print (newspapers, magazines, billboards, mail), and offers the opportunity of a wide reach with the drawback of a high cost. On the other hand, digital marketing comprises many digital and interactive mediums such as the Internet, mobile, and e-mail marketing. Children spend an average of 2 hours/day (Sigman, 2012) and adults of 8 hours/day (Editors, 2021) consuming digital media, so these mediums enable companies to easily reach their specific target market at a low cost.

Another benefit of using digital marketing is that it allows interaction with customers, previously non-existent in traditional marketing. Though digital marketing allows companies to reach a broader audience worldwide, traditional marketing reaches a more varied one, and it is more effective at acquiring new consumers, raising brand awareness, and brand preference as a consequence of customer to customer (C2C) message sharing (F. Pendry & Salvatore, 2015; de Vries, Gensler, & S.H. Leeflang, 2017). Both methods should coexist, digital marketing is not meant to replace traditional marketing. Instead, they should interchange roles across the customer path.

The implementation of technology in marketing has given rise to a new journey in the history of marketing. In 1987, Noel Capon and Rashi Glazer talked about the instability caused by the rise of technology in businesses and the impact this would have in the workplace, changing from a labor-focused economy to an information-based one. They define technology as “the information required to produce and/or sell a product or service (...) intended for use”. Artificial intelligence (AI) is one of the main technologies in marketing that enhances the process once strategies have been settled and technology tools to be used determined (Baltés, 2017).

Table 4: Traditional marketing vs digital marketing

Traditional marketing	Digital marketing
Includes print, broadcast, direct mail, and telephone	Includes text messaging, online advertising, email marketing, affiliate marketing, content marketing, native advertising, SEO, SEM, PPC, SMM
Origin in business history and culture	Origin in digital technology
One-way communication; static	Two-way communication; dynamic
Expensive and time-consuming	Considerably affordable and quick
Limited but diverse audience reach	Wide global but specific audience reach
Decreasing investment funds	Increasing investment funds
The goal is to initiate customer interaction	The goal is to drive results
Helps businesses reach high local coverage, provides information that can be re-read or re-watched, easy to understand and recall	Helps businesses achieve low cost of entry, measurable ROI, improved targeting, dynamic adaptability, immediate connection, relationship building

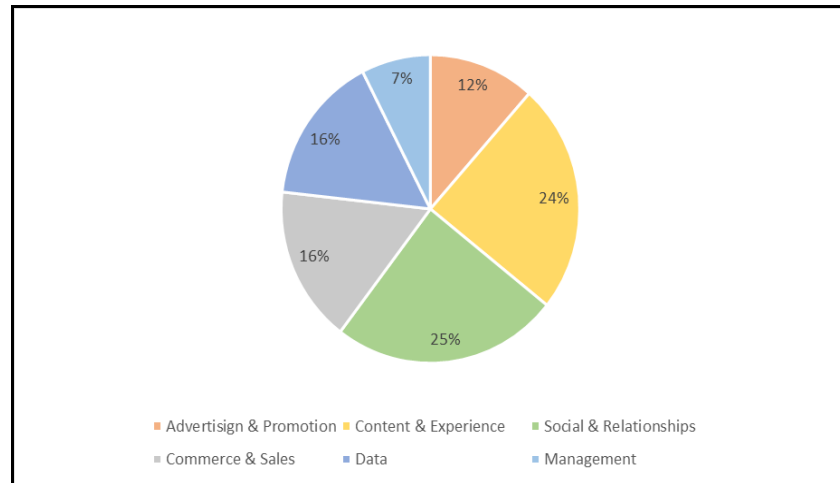
Source: Prepared by the author based on the book Marketing 4.0: Moving from Traditional to Digital published in 2017 by Kotler, Kartajaya, & Setiawan (Kotler et al., 2017); and the article What is marketing? By the American Marketing Association (American Marketing Association, n.d.).

Marketing technology, also known as MarTech, refers to all the marketing technologies marketers use to plan, execute, promote and measure their digital marketing campaigns with the goal of reaching out to their target audience and

engage them. Companies are focused on obtaining a detailed description of the users by compiling their digital behavior to adapt the products that are shown and the way these products are presented to the specific user in their emails or their website, in other words, in customization (or personalization). Marketing technology solutions enable them to analyze all data on a single platform, making it easier to organize and identify patterns shared among customers when making purchasing decisions with the goal of automatizing processes. Indeed, according to a study carried out by Morar Consulting in 2017, senior marketers mostly use marketing technology to better understand customers and prospects, followed by an interest to automate processes and reduce time on administration (Teicher, *The 3 Most Important Reasons Marketers Use Marketing Technology*, 2017). Additionally, Ascend2 and Research Partners carried out some researches that found that 69% of marketers considered that the goal of marketing technology was to increase ROI in 2017, moving down to second place in 2019 and 2020 with the new main goals being improving marketing efficiency and improving the customer journey.

MarTech tools are designed for all types of digital marketing, from content marketing to analytics. ChiefMartec groups the solutions in six groups: advertising and promotion, content and experience, social and relationships, commerce and sales, data, and management. In 2020, most of the solutions were dedicated to social and relationships, and content and experience, whereas management was the category less crowded (Brinker, 2020) (See Figure 1). Besides, a survey carried out by Ascend2 and Research Partners (2019) found that marketing automation/email/customer relationship management (CRM) and marketing data/analytics were the most effective MarTech. According to the *Yearly Marketing Survey 2019*, 62% of marketers considered customer centricity to be the most important competence when working on innovative projects. This is reflected in the high number of solutions focused on the social side and the experience of the customers.

Figure 1: MarTech Solutions per Category, 2020



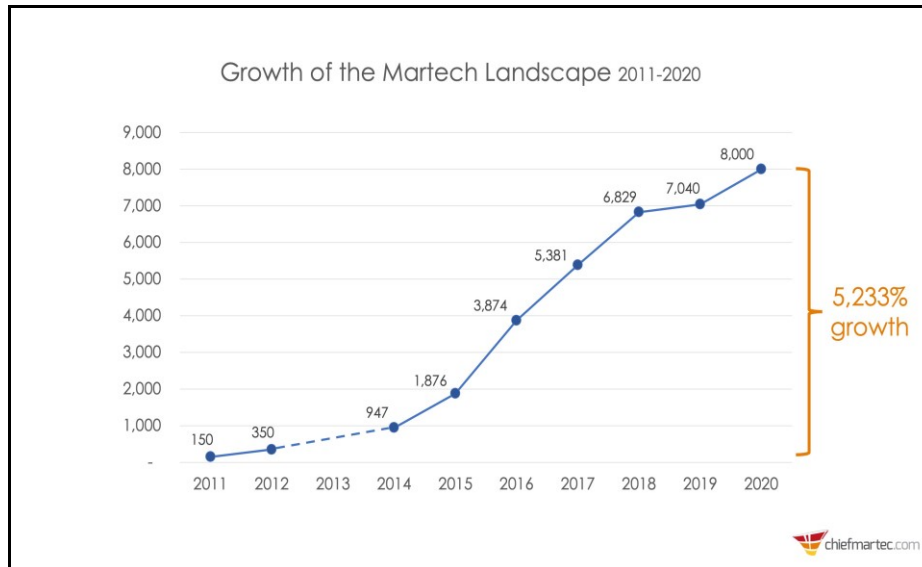
Source: Prepared by the author based on the article *Marketing Technology Landscape of 2020* by Scott Brinker published in 2020. (Brinker, 2020).

The selection of tools marketers use to leverage their operations is called a MarTech stack and examining it is essential for optimization. Some of the most famous platforms are Salesforce, Hootsuite, Adobe, Oracle, HubSpot, Shopify, Microsoft, Slack, Marketo, MailChimp, and Google Workspace (formerly G Suite).

According to Scott Brinker (2020), from the approximately 150 vendors in 2011, the “MarTech 5000” landscape has grown exponentially. In 2017, there were approximately 5,000 solutions available and for commercial purposes, they were labeled as “MarTech 5000”. As of 2020, there were more than 8,000 marketing tools globally, 13.6% up from 2019, even with 619 solutions disappearing (Brinker, 2020). In a 2019 survey, 64% out of 316 marketers said their companies’ MarTech budget and investments were to increase and 34% that it was going to stay the same (Mulligan). The number of marketing technologies available has increased dramatically over the last years and continues to do so faster than businesses can absorb them, turning into an extra workload (MarTech Today, 2020).

Companies are already responding to this increasing number of technologies by hiring people, confirming the idea that the automation of some tasks and the

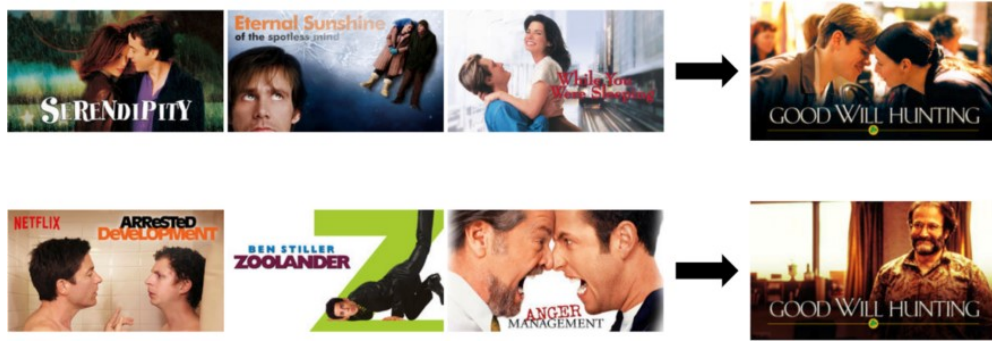
consequent elimination of some jobs is counterbalanced with the creation of new ones (Acemoglu & Restrepo, 2019). The increase in MarTech tools is lead by the strong demand of the market. In 2018, 82% of marketers relied on MarTech analytics to support their marketing efforts (Rose, 2018). Scott Brinker (2013) stated what he called the Martec's Law. He believes that while "technology changes exponentially, organizations change logarithmically", in other words, technology evolves at a fast pace but organizations change slowly. Indeed, in a 2017 survey, 72% of the marketers said the MarTech landscape was evolving rapidly but only 33% said their company's use of MarTech had evolved rapidly in the last 3 years (Chiefmartec.com, Walker Sands Communications). In 2018, 28% of marketers said technology advances faster than their companies can handle (Walker Sands, 2018). In order to manage the different pace of the two, companies need to be more adaptative and work towards becoming agile organizations (Brinker, 2016), but in 2018 most organizations still lack the agility necessary (Walker Sands Communications, 2018).

Figure 2: MarTech Landscape Growth (“Martech 5000”)

Source: Image from the article *Marketing Marketing Landscape Supergraphic 2020* by Scott Brinker published in 2020. (Brinker, 2020).

Nowadays, we are used to seeing Martech and sometimes we don't even categorize it as such. Some examples are online forms that get automatically filled with information previously submitted and stored on the web, or companies that offer different website landscapes and content to match their user's interests, also adding some predefined scenarios for each target segment or type of visitor. Netflix uses marketing technology constantly in its platform to perform personalization by proposing content on its homepage that is relevant to each user. Through the use of algorithms, the app collects users' information and analyzes it to recommend similar content to improve the member experience. Moreover, they trained the algorithm to show personalized artworks. In the beginning, every title had one single artwork. However, Netflix decided that given its diverse user base, they would create several artworks and train the algorithm to find the one that aligned most with each user's taste (Chandrashekar et al., 2018). For example, if a user usually watches romantic movies, Netflix will recommend movies displaying romantic artwork, while if they watch comedies, they will get a funny artwork or the picture of a famous comedian that is starring in the show (See Figure 3).

Figure 3: Netflix's personalized recommendations



Source: Image from the article *Artwork Personalization Netflix* published in 2017. (Netflix, 2017).

3.1.3 Current trends

It is important to bear in mind the different trends that customers experience in today’s world in order to efficiently leverage and implement digital technology tools. The more knowledge companies aim at obtaining from individuals, the better their products will match their needs and demands. Deloitte Insights identified seven customer trends for 2021 which become crucial for marketers as it allows them to merge customer needs and digital technology to succeed at their marketing strategies. The 7 trends that Deloitte identified are summarized in Table 5: Digital Marketing Trends.

Table 5: 2021 Digital Marketing Trends

	What is it?	Key concepts	Marketers steps
Purpose	Make decisions based on the company’s mission	<ul style="list-style-type: none"> - “Why” of the company - Who it serves 	<ul style="list-style-type: none"> - Set purpose-based KPIs - Build emotional connections through customer-brand shared values - Ensure consistency between messaging and purpose
Agility	Adapting to the fast pace digital evolution	<ul style="list-style-type: none"> - Digital transformation - CRM, CDP platforms - AI, machine learning - KOL figure 	<ul style="list-style-type: none"> - Create a holistic view of customers - Predict customers’ needs - Communication through non-traditional channels - Deliver a personalized service
Human Experience	Build a personal connection with customers	<ul style="list-style-type: none"> - Human-driven brands - Customer engagement - Social impact 	<ul style="list-style-type: none"> - Provide value-based human experiences - Use the “why” to connect with their target market
Trust	Connecting messaging and delivery	<ul style="list-style-type: none"> - Transparency - Humanity - Capability - Reliability 	<ul style="list-style-type: none"> - Develop cross-functional teams that share related trust-based KPIs - Incorporate trust competencies into brand messaging - Prove expertise and understanding
Participation	Engaging with customers and making them part of the company’s promotion process	<ul style="list-style-type: none"> - Low-touch more common than high-touch engagement - Online conversations and reviews 	<ul style="list-style-type: none"> - Understand who is participating, where, and their motivations - Prove expertise and understanding

		<ul style="list-style-type: none"> - Arise of KOC - Participation decreases with age 	<ul style="list-style-type: none"> - Identify where participation fits in the customer journey - Deepen customer-brand relationship
Fusion	Think up and develop pioneering ideas	<ul style="list-style-type: none"> - Partnerships with companies from other sectors - Growth in digital experiences 	<ul style="list-style-type: none"> - Increase their share in decision making - Push the fusion addressing customer needs
Talent	Using digitalization to improve learning methods and team skills	<ul style="list-style-type: none"> - AI as a complement to workforce skills - In-house creation - Gig economy for temporary external creativity and skills 	<ul style="list-style-type: none"> - Improve talent models by - Invest in the skillset of employees and the company's culture

Source: Prepared by the author based on the 2021 Global Marketing Trends report by Deloitte Insights published in 2020. (Deloitte Insights, 2020).

Besides these more abstract trends Deloitte identified in its report, there are many strategical trends enabled by MarTech and technology that are experiencing an increased use in marketing. We are going to present the top 10 we consider most relevant after consulting several articles and identifying the ones that are most frequently mentioned among all (Gallegos, 2021; Dave, n.d.; Adams, Kelly, & Koltun, 2021; Patel, n.d.a; Lee, 2020; Schaffer, 2021; “2021 digital marketing trends”, 2021; Mautz, 2021; Olenski, 2021).

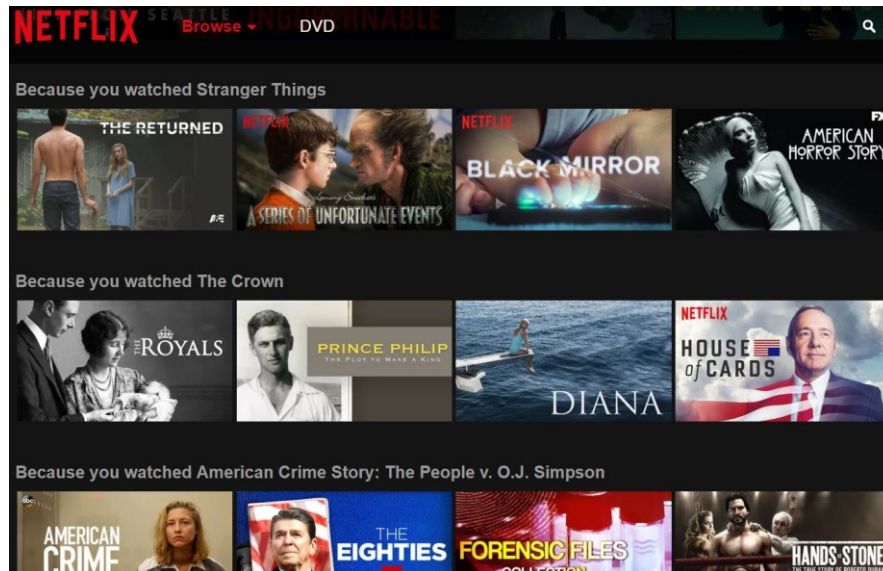
Figure 4: 2021 Digital Marketing Trends



Source: Prepared by the author

1. Personalization. Following the direction of the customer-centric approach that emerged with marketing 2.0, personalization is delivering a customized shopping experience to each customer, from communicating with them using their name to tailored product recommendations and content. Compared to traditional marketing, personalization stands out to consumers by making them feel valued and providing relevant content to them instead of general irrelevant recommendations that bother 63% of consumers (Marketo, 2015). Today's technology, especially AI and the data collecting tools, allows marketers to gather and analyze high volumes of data available about their customers, obtaining information to best solve their needs and identifying the messages that will resonate most with them. This is the information that will be used for personalization efforts. Almost 75% of customers engage only with personalized content, unsubscribing from mass-blasted emails (SmarterHQ, n.d.), 99% of marketers stated it helped to strengthen customer relationships (Evergage, 2020), and 77% of customers say they recommend brands that provide a personalized experienced (Gladly, n.d.). Emails targeted to each recipient with content related to their interest and browsing history have higher click and conversion rates (Bluecore, 2019), so companies should focus on personalization when dealing with customers. Some companies that strive to use personalization are Amazon, with its recommended products according to customer previous purchases and searches; Netflix, recommending content based on the shows previously watched; and Spotify, creating tailored playlists with songs liked by the user and similar. Geo-fencing is another trend inside personalization. It allows real-time targeting using the user's location. Personalization must be combined with marketing automation to deliver hyper-personalized messages across channels. Automation will target content email to each recipient and decide the best channel to communicate with them.

Figure 5: Example of Netflix's personalized recommendations



Source: Image obtained from HBS Digital Initiative. (Harvard Business Review 2017).

2. Automation. Hyper-automation is inevitable (Burke, 2020), indeed, the marketing automation industry is set to double from 2019 to 2024 (Business Wire, 2019). With the development and sophistication of MarTech, marketing automation has become a must, occupying the second place of priority technology for marketers (Adweek Branded, Dun & Bradstreet, 2019). Marketing is automating processes using technology to maximize efficiency and improve marketing/sales alignment and will continue to do so with the use of artificial intelligence (AI) and machine learning (ML) to increase personalization. The customer journey is not clear or linear anymore, it is complex and unpredictable, so marketers are using automation software to understand customer behavior and provide relevant and personalized content. Automation is crucial to deliver personalized customer experiences. Businesses can reach customers with automated messages, automate and plan online marketing campaigns, understand the customer journey, or nurture prospects to find qualified leads. Using automation allows marketers to focus on complex tasks

while reducing human error in repetitive tasks. MarTech tools analyze big sets of data to find the right audience and create relevant content and messaging it across all marketing platforms. Although 72% of customers like receiving personalized content, 86% are concern about the data privacy it entails (SmarterHQ, n.d.). To answer this, companies need to take some measurements to make data consent clear, provide transparency, and secure their data. Some other tasks where marketing uses automation are the buying and selling of online advertising, programmatic advertising, and in AI-powered chatbots, enhancing the customer experience (CX).

- 3. The “next tech”, Marketing 5.0 technologies.** The use of data-related skills is becoming more prominent in all areas of business, including marketing, while traditional marketing skills, such as market research and product marketing, are expected to decrease (Marketo, 2018). By 2025, AI and ML will be the most demanded marketing skills, followed by neuromarketing, CX/UX, experiential marketing, and data analytics (Marketo, 2018). These technologies analyze vast amounts of data to understand the modern customer journey, most complex than the traditional one. Augmented Reality (AR) is another trend part of the MarTech stack, used in PWAs and apps, that creates chatter by augmenting user experience and content. It is an open simulation where the real world merges with the virtual world. Although some companies use AR for promotional purposes, most of them use it as a tool to increase engagement and move customers across the customer journey (Smart Insights, n.d.). Virtual Reality (VR), Internet of Things (IoT), and the rest of Marketing 5.0 technologies mentioned in section 3.1.4 Tools will continue to improve and be relevant in the marketing industry for years to come.

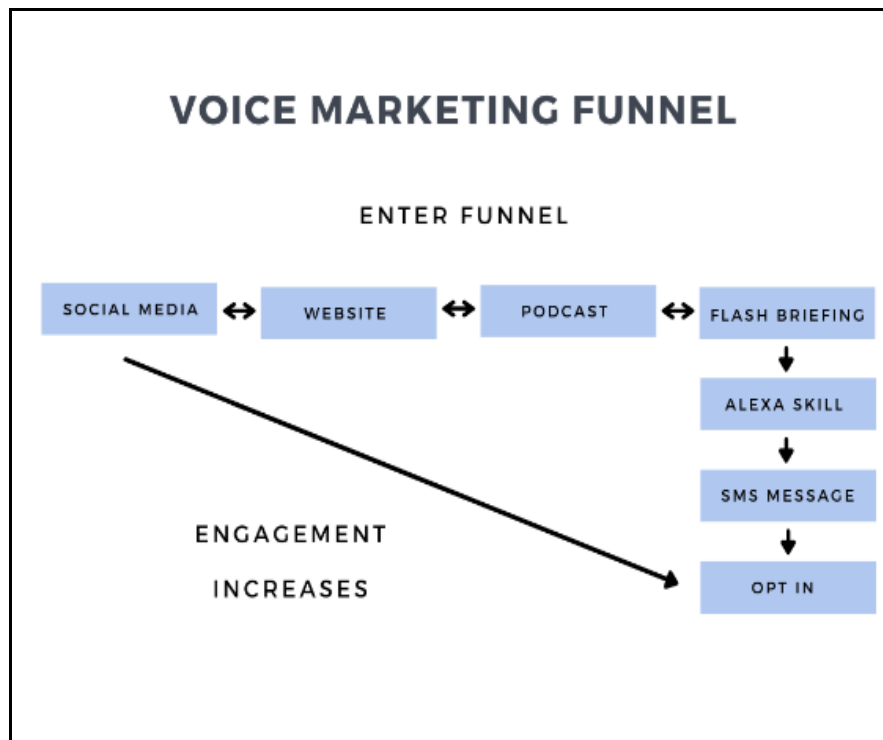
Image 2: The “next tech”

*Source: Prepared by the author based on the book Marketing 5.0.
(Kotler et al., 2021)*

4. Voice search. With an estimated 38.5% of the total population using a voice assistant tech (Petrock, 2020) and 71% of consumers favoring doing voice searches over typing (PwC, 2018), voice search and smart speakers, enabled by the development of NLP, have emerged as a potential tool for marketing purposes that is barely exploited. Although younger generations have quickly embraced voice search, older generations are still experimenting with it. One-third of adults have used voice search (Petrock, 2020) and one-fourth owns at least one smart speaker, with Amazon Alexa leading the market (Sterling, 2020). In 2016, voice search was already being recognized as one of the top three SEO trends to have an eye on (AIM, 2016) with a prospect of more than half of all US households having one smart speaker by 2022 (Juniper Research, 2017). Moreover, smart speakers' sales are predicted to surpass \$30 billion by 2024 (Koncept Analytics, 2020). Although it does not provide monetization beyond paid features (Kavanagh, 2019), there is a huge advertising opportunity, indeed, more than one-third of consumers find voice

ads less intrusive than display ads (Shi, Chan, & Cheong, 2019). However, it is still not commonly used for these purposes. People mainly use it for playing music, checking the weather, and setting alarms and reminders, and only one-fourth use it for doing screenless online searches and shopping (Shi et al., 2019). Amazon Alexa provides flash briefings, short podcasts about daily news and topics of interest, creating a new channel to reach consumers. Accordingly, brands are increasing investment in voice technology and creating voice marketing funnels. Fisher (2020) proposes the following marketing funnel: raising awareness, getting the user interested, and leading him to flash briefing. Once there, they can ask smart speakers for information and reminders about the brand via email and SMS. To incentive users to listen to the briefings, companies are setting up giveaways that revolve around them.

Figure 6: The Voice Marketing Funnel



Source: Prepared by the author based on the article How to Create Voice Marketing Funnel with Alexa Flash Briefings by Teri Fisher published in 2020. (Fisher, 2020).

- 5. Updates in SEO.** A good keyword and some backlinks are not enough to rank on page 1 in Google. Some of the major shifts of the last decade are taking place in 2021 and SEO specialists are facing new challenges. The use of voice search and mobile phones to do online searches is increasing. To continue improving search relevancy, Google is making major changes to its algorithm.
- 6. User-generated content (UGC).** As the name says, UGC is any type of content created by customers instead of the brand. UGC is perceived as more authentic than brand content because people trust people. This idea is supported by a TurnTo research (n.d.) where 90% of shoppers revealed having bought a product after seeing UGC. This modern “word of mouth” increases trust and reliability in the brands, generates customer engagement, and drives conversion rates. Besides the revenue generated with UGC, marketers can compile customers' content and analyze it to create knowledge databases.
- 7. Social media.** From the 1 million monthly active users (MAUs) in Myspace in 2004 (Ortiz-Ospina, 2019), social media has risen dramatically, reaching more than half of the world’s population (Kemp, 2021) with the average person having 8.6 social media accounts (Dean, 2021). Marketing takes advantage of this opportunity of reaching a large number of people to increase brand awareness, communicate with customers in a more personal way, and now even sell through the apps. To provide the best experience, social media platforms are continuously adding new services and features that later marketing finds the way to leverage and include in its strategy.
- 8. Neuromarketing.** Blending neuroscience and marketing, neuromarketing is used for market research purposes as a tool for studying customer behavior, helping companies to understand and predict their conduct to, ultimately, provide more customized services (Harrell, 2019). Neuromarketing is usually used for evaluating reactions to packaging, TV commercials, and print ads,

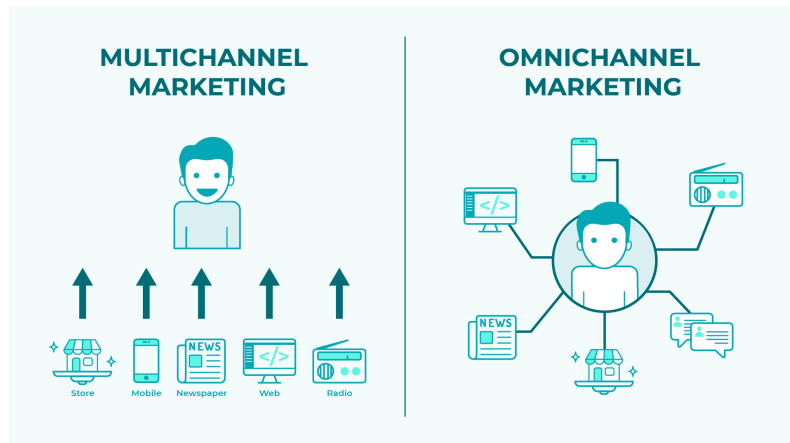
because they play a key role in getting customers' attention and their buying decision (Silayoi & Speece, 2004). Indeed, Harvard Professor Gerald Zaltman (2003) stated that 95% of thought occurs in the subconscious mind, and this includes buying decisions. It typically uses techniques such as brain imaging, eye scanning, and sensory appeal, and emotional measurement, that require sophisticated technologies, making it more costly and less likely to be used than other resources. Currently, it is used by only 8% of marketers, but it is expected that 52% will use it by 2025 (Marketo, 2018). Moreover, the global neuromarketing market is estimated to increase by 64% by 2026 (Mordor Intelligence, 2020). Supermarkets are taking advantage of this trend to collect information about where customers are looking to modify product placement and improve their shelves arrangement, while tech companies are analyzing how users scan their phone and computer screens. A study by Nielsen Norman Group shows that the F-shaped pattern is the most common way of screen scanning, favoring the top and left side of the screen (Pernice, 2017). Brands are using neuromarketing to deepen customer understanding and increase customer engagement, customized products, and services to meet their expectations.

Figure 7: Neuromarketing



Source: Image from IAB's website (IAB Australia, 2014)

9. Omnichannel marketing. Hubspot defines omnichannel marketing as “understanding whom you’re communicating with across channels (website, emails, social, apps, call center, stores, ads, etc.) and then connecting those channels to give individuals what they want” (Morris, n.d., page 3). In other words, omnichannel marketing consists of marketing across multiple platforms that interact with each other and with the customer to increase the number of touchpoints, creating an immersive integrated experience. It responds to customer needs throughout the customer journey, focusing on personalization and delivering relevant messages while multichannel marketing focuses on a reach with all channels available to the customer but not integrated or updated along the journey. Customers want to browse and purchase products and services in physical stores and online platforms, so companies need to deliver consistent messages and content across all channels that are tailored to them. This strategy updates customer data along the customer journey and connects all together so future messaging relates to customers' previous actions. An analysis of over 2 billion campaigns shows that using an omnichannel strategy improves retention rate, engagement rate, purchase frequency, and average order value (Omnisend, 2019). Besides, customers who experience omnichannel marketing spend 4% more in-store and 10% more online (Sopadjieva, Dholakia, & Benjamin, 2017). An omnichannel strategy can be enhanced using the “next tech”, for example, AR can be included to support digital content and increase customer engagement and updating the different channels according to marketing trends so the company can nurture potential customers from wherever they come into contact with the company.

Figure 8: Multichannel Marketing vs Omnichannel Marketing

Source: Image from Beabloo's webpage. (Beabloo, 2019).

10. Ecommerce. By 2021, there will be 2.14 billion people shopping online (Coppola, 2020), around 27% of the world's population. Ecommerce has boomed in the last few years and even more in 2020, as a consequence of the COVID-19 pandemic, reaching 18% in retail sales, an increase of 4.4% from 2019 (eMarketer Editors, 2021). With physical stores slowly getting back to normal operations, the 2021 prospect is a slower increase, but long-term retail eCommerce sales have a good prospect, estimated at \$6.388 trillion by 2024, almost double the amount of 2019 (eMarketer Editors, 2021). Most consumers now rather shop online because it is convenient (KPMG, 2017) and almost half plan to keep their online shopping frequency after going back to normal (Global Web Index, 2020) By February 2021, most eCommerce sales were placed in mobile devices (IRP, 2021). Smartphone shoppers make purchases on apps twice the amount they do on the mobile web (Button, 2019). Customers' buying behavior varies among generations; internet users over 45 rather buy online using desktop devices and baby boomers are the only generation that favors in-store shopping over online (Button, 2019). However, they all want an easy and fast buying process (Google, 2015), flexible return policy, and self-service experience (Butler, 2019), in other words, a seamless shopping experience.

Although eCommerce is growing exponentially, only 1.94% of customers who visit a website end up buying something (IRP, 2021), however, there is room for improvement as 49% abandon their carts because of high extra costs (taxes, fees, shipping) (Baymard Institute, 2021). There is a lot of growth potential, but competition is high, so companies need to personalize the customer experience, make the customer feel special, and improve the overall shopping experience to obtain higher conversion rates and retain customers. The use of AI-powdered chatbots to interact with customers and help them find the right product is enhancing the eCommerce experience. Moreover, businesses can use the “next tech” to integrate multiple channels and create an omnichannel ecosystem.

All of them either have been enabled, implemented, and improved thanks to the use and rapid advancement of technology. Indeed, marketing is seeing growth in the use of the Marketing 5.0 technologies or “the next tech”. All these trends are enhanced with AI in some kind of way.

Table 4: How AI enhances marketing trends

Marketing Trend	AI Impact
Personalization	- Provide insights using Big Data
Automation	- The base of automation with ML - Segment large amounts of data
Use of MarTech (AR and VR)	- The base of automation with ML - Make characters more like real-life people
Voice search and smart speakers	- The base of automation with ML - Compile information about customers
Updates in SEO	- Used with entity understand to create relational databases
UGC	- Identify and display smarter UGC
Social media marketing	- Find the right influencers to partner - Power chatbots to interact with consumers - Send targeted emails
Neuromarketing	- Extract meaningful patterns from datasets
Omnichannel marketing	- Understand customer behavior to deliver personalized content

Ecommerce	- Predict customer behavior and send recommendations
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Source: Prepared by the author

3.1.4 Tools

Marketing 5.0 is the use of the “next tech”, a group of technologies that simulate marketers’ abilities, to deliver a better customer experience (CX), the key priority of over one-third of customers (Deloitte; Duke Fuqua; AMA, 2021). Marketers must find the right tools and use them to support their previously designed strategy (Kotler et al., 2021). These technologies are not meant to substitute humans, they compile and analyze information, finding patterns and helping to bump the process but, ultimately, marketers must be present to read between lines and understand the underlying cause of customer behavior. Because robots cannot understand humans, only humans have the capability to understand other humans. “Data-driven marketing is the first step in implementing Marketing 5.0” (Kotler et al., 2021, p.129). The amount of customer data available is increasing exponentially and is extremely helpful to perform segmentation and targeting. However, there is too much information and marketers need to know how to filter and select the right one.

CEOs believe technological advances are the global trend that will transform their business most and want to use it to get closer to consumers (PwC, 2016a). We can differentiate six human-mimic technologies (Kotler et al., 2021), each meant to mimic different skills that will improve marketing in the next decades.

- 1. Artificial Intelligence (AI):** replicates human cognitive abilities by learning from unstructured customer data to help marketers discover insights about customers. AI engines must be trained to learn using algorithms that improve over time as they are fed with big data, large volumes of complex structured and unstructured data. These algorithms are called machine learning, a subset

of AI. It is the fastest growing and most used emerging technology. In marketing, AI can be used for customer support, automated virtual assistant, and data analysis and analytics. When mixed with other technologies, AI can also be utilized to provide the right offers to the right customers.

- 2. Augmented Reality (AR) and Virtual Reality (VR)**, also known as mixed reality: enhance productivity through new ways of interacting with machines and other humans. Although they both help to mimic human imagination, they operate differently. AR allows the seamless display of digital content over the real-time view of the actual world (Scholz & Smith, 2016). Many companies have embraced this strategy in their marketing programs. It is a great tool to enhance brand value and increase customer engagement with smartphones and other digital devices, given its high potential (Rohm, Gao, Sultan, & Pagani, 2012). For example, it can create virtual dressing rooms, elevate the experience with product packaging or actual products, or even turning products into a virtual format (Yuen, Yaoyuneyong, & Johnson, 2011). VR is software that creates interactive three-dimensional atmospheres to wholly immerse viewers in new virtual worlds (PwC, 2016b). Advertisers take advantage of this trend to deliver more creative advertisements and organizations have started VR-based content creation to make customers part of a unique experience that helps to showcase the benefits of their products and services innovatively. In 2020, the predicted number of VR headshots sold was 82m. While VR creates a new world, AR augments the existing one incorporating virtual objects. AR is easier to implement as most people have access to a smartphone and VR requires a more sophisticated device. Most companies were using these tools for product design and development, and improved process design.
- 3. Natural Language Processing (NLP)**: is a part of AI that helps to analyze and understand human communications. Language is complex, many words can have several meanings, so NLP is hard to master. It is used to optimize SEO,

text translation and full text providing smart suggestions, highly used in e-commerce product descriptions, or classifying information, such as the case with spam filters or product classification, enabling the creation of a stable clean database (Findwise, n.d.). Chatbots and virtual assistants are an example of NLP, they are convenient because they are available 24/7, resulting in increased customer satisfaction, and are a cost/time-saving solution for the company, giving marketers more time to focus on more complex tasks. Combined with AI, it can understand customer's emotions, learn how to reach and match the style of the sender. A key technique is Sentiment Analysis (SA), usually performed by compiling textual customer data, such as reviews and social media comments, to understand the perceptions about the brand and products in customer feedback so marketers can make the necessary adjustments to guide customers to purchase (and re-purchase) and help the company stay relevant in the market.

- 4. Robotics:** use of machines to automate human activities usually trained with a computer program. Some of the tasks they perform are predictable tasks and data management (PwC, 2016b). Robotics can be combined with AI to elevate the level of autonomy and improve sensory skills, such as emotions, being able to coexist with humans, and learning on their own, in other words, social and cognitive robotics (Perez, Deligianni, Ravi, & Yang, 2017). Robots are considered to be part of the future of interactive marketing. Currently, they are performing customer service tasks, creating copywriting and website online content, but the future is in social robots. Among the benefits they provide are enhanced customer experience and engagement.
- 5. Sensor technology:** systems that mimic human sensations. It is usually combined with IoT to digitally transform the brick-and-mortar space creating a unique experience. Some retailers are using sensor tech to implement the scan-as-you-go functionality, allowing customers to scan the products they

want to buy and just get charged by showing a QR to get charged when exiting the store. Other functionalities in-store include improving customer navigation in-store, creating interactive digital advertising, and recognizing customers. One of the trends of 2021 is the “lift-and-learn” display sensor tech that educates customers by creating digital content for every content on the shelf (Sumner, 2020). Brunner (2017) identifies a missed opportunity still not covered, brands can insert sensor tech inside their products to get insights about how customers engage with them. Sensorial experiences allow companies to differentiate and position themselves as an image in consumers’ minds, offering value at a deeper level (Hulten, 2011).

- 6. The Internet of Things (IoT) and Blockchain:** Blockchain is a distributed digital database that provides security and anonymity when dealing with online transactions using software algorithms. In marketing it can be used for identity and record management (PwC, 2016b), making data more reliable and transparent. IoT connects the physical and digital world, facilitating the exchange of data, with the use of sensors and software to gather information from linked devices, providing marketers with insights that can be used to perform better decision-making, automate processes, and improve customer experience (CompTIA’s Emerging Technology Community, 2019), as well as providing customer support, implementing smart data pricing models and delivering real-time market insights (PwC, 2016b).

Table 5: Marketing 5.0 technologies (“the next tech”)

Technology	Definition	Benefit(s)	Example
Artificial intelligence (AI)	Simulate human capabilities	Personalize content Optimize customer experience	Starbucks predictive analytics for personalization
Augmented Reality (AR)	Display digital content over physical products	Allow product visualization Increase customer engagement	Timberland virtual fitting room in Maktow Gallery
Virtual Reality (VR)	Create a new digital reality	Provide immersive experience	Volvo Reality app
Sensor Tech	Mimic human sensations	Data collection Provide unique experience	Clarins Lift and Learn
Natural Language Processing (NLP)	Understand human communications	Detect and increase customer satisfaction Guide customers to purchase and re-purchase	Sephora Chatbot
Robotics	Use of machines to automate tasks	Elevate autonomy	Amazon order confirmation email
Blockchain	Digital database	Enhance security Record customer data	Accenture Blockchain Marketing
Internet of Things (IoT)	Network of linked devices that gather and exchange real-time data	Improve overall customer experience	Apple Watch

Source: Prepared by the author based on the book Marketing 5.0: Technology for Humanity by Kotler, Kartajaya, and Setiawan published in 2021. (Kotler et al., 2021).

3.2 Switching the main focus: customization and hiper-personalization

The father of advertising, David Ogilvy, said “Do not address your readers as though they were gathered together in a stadium. When they read your copy, they are alone. Pretend you are writing each of them a letter.” Although this advice was meant to serve as a guideline to advertisers, we can translate it into marketing understanding the main idea; communicate with each customer individually, and personalize his customer journey. This marketing strategy is called “segments of one”. An Accenture study showed that 75% of customers are more likely to buy from companies that offer personalized services (Accenture Interactive, 2018) and 86% are willing to pay more for a better customer experience (Oracle, 2011). However, in 2021, still many companies send generic irrelevant marketing messages missing a great opportunity to acquire new customers. The most common barriers to personalization are the lack of employees dedicated to it, the lack of a clear roadmap, and the inadequate cross-functional coordination (Abraham, et al., 2017).

53% of CEOs claim the purpose of their organization is to create value for their customers (PwC, 2016a), so it is important to understand customers and know what they are looking for. In a high-tech world with increased online social interaction, customers long for high touch and things tailored to their specific needs, more personalized products, and more personal services (Kotler et al., 2017). Indeed, personalization has taken a step up, and now is the era of hyper-personalization. The emergence and development of MarTech and data-driven marketing have made personalization more attainable for companies (Acoustic, 2019), and what is more, it has enabled real-time personalization. While personalization means tracking the customer journey and knowing the customer’s name, hyper-personalization is about instant access to his information on every channel to provide an immediate customized service leveraging AI and real-time data. Moreover, personalizing customer journeys and driving the next-best offers in real-time are the most popular uses of AI today, according to (Salesforce, 2019).

Artificial intelligence and machine learning can analyze and process large amounts of data to create personalized content at a massive scale, allowing marketers to focus on more strategic and complex tasks. The data is continuously updated with the customer's interactions to deliver relevant content at all stages of the funnel or flywheel.

The online customer journey is highly personalized (Gitter et al., February 2020). The customer first sees targeted display ads and receives personalized emails. When he goes into the website, his search history and products seeing are tracked so he receives personalized recommendations. If he decides to place the order, he will receive suggestions with similar products or, if he is not a first-time customer, also with previously purchased products. However, if he abandons the cart and the company has some contact information, he will receive personalized reminders and suggestions for future purchases. This is an example of the current hyper-personalization,

Implementing an omnichannel experience facilitates real-time personalization. By following customers along the journey and coordinating digital and physical channels and messages, companies obtain information about the purchase history of the consumer, profile, and search history of all channels. AI-based systems facilitate personalization by incorporating machine learning into each customer interaction across multiple touchpoints in an omnichannel environment, from desktops to mobile devices and all social media involved, enabling marketers to deliver the right content when it is contextually relevant based on the customer's real-time engagement. This data can be used to deliver tailored product recommendations to the customer.

The combination of an omnichannel strategy with big data and AI can help companies hyper-personalize the customer journey of their customers.

3.3 Commercial funnel and flywheel

Traditionally, the marketing process was considered to act in the same way as a funnel, from one step to the next some prospects were lost, and it ended after the customer performed “the action”, whether it was buying a product or subscribing to the email list. This traditional commercial funnel or purchase funnel uses the AIDA model, invented in 1898 by St Elmo Lewis and composed of four stages: awareness, interest, decision, and action (Doyle, 2011). The advancement of technology, enabling conversations in different platforms, and creating more savvy customers that can find and compare information from multiple sources, has changed the funnel shape to a loop that customers can enter and exit at any stage.

Nowadays, many decisions are social decisions influenced by family, friends, or online opinions, and customer experience, loyalty, and advocacy have become crucial for the success of the companies. Taking these ideas into consideration, some modern models have been proposed. In the first place and expanding on the traditional model is the AIDAR model (Smart Insights, 2013), which proposes the addition of a retention phase, although some people call it the re-order phase, as the closing of the funnel. This new model places value on the post-sale experience and pleasing current customers to turn them into loyal customers. This is a great addition to the traditional model because customer acquisition costs are rapidly rising (Campbell, 2018); acquiring new customers costs 5 times the cost of keeping an existing one (Tidey, 2018), and the probability of selling to an existing customer is around 55% higher than for new customers (Griffin, 1995). Similar to this model is the 5A's Model, composed of the same 5 steps with slightly different names (Kotler et al., 2021). There are two other modern models that are slightly different: the hourglass model, an evolution of the traditional model with an emphasis on the post-sale experience called, and the looping digital marketing funnel with a research loop in the traditional interest phase and a loyalty loop in the retention phase. All these models present the same phases in greater or less detail.

However, there is one thing missing in these models: the customer as the center and the means to success.

Table 6: Modern Stages of the Customer Journey

AIDAR	5A's	Hourglass	Looping	Flywheel
Awareness	Aware	Engagement Education	Awareness	Attract
Interest	Appeal	Research	Consideration Research and discovery loop	Engage
Desire	Ask	Evaluation Justification		
Action	Act	Purchase Adoption	Purchase	
Retention	Advocate	Retention Expansion Advocacy	Post-purchase experience Loyalty loop	Delight

Source: Prepared by the author based on the article Using the AIDAR purchasing funnel model by Smart Insights (Smart Insights, 2013); the report The Modern Digital Marketing Funnel by WebFX (Web FX, n.d.); and the book Marketing 5.0: Technology for Humanity by Kotler, Kartajaya, & Setiawan published in 2021. (Kotler et al., 2021).

As a substitute to the traditional funnel and following the customer experience obsession, exemplified in the Amazon Virtuous Cycle Model, HubSpot (n.d.) proposes the flywheel model, a customer-centric loop that uses the momentum of happy customers to turn them into loyal customers and attract new customers. They become promoters of the brand. It highlights three phases that intertwine with the models previously presented: attract, engage, and delight. Contrary to the traditional funnel, all modern models consist of a constant loop that keeps going without an end boosted by consumers. The loop is compared to a flywheel because it is energy-efficient, its momentum is powered by customers that increase business without the company investing resources in acquiring new customers once friction points are removed. This model works because as we discussed in the user-generated content section, people consider other people's opinions as a more credible source than businesses. It is affected by three factors: speed, size, and the friction it encounters. Satisfied customers' referrals, repeated

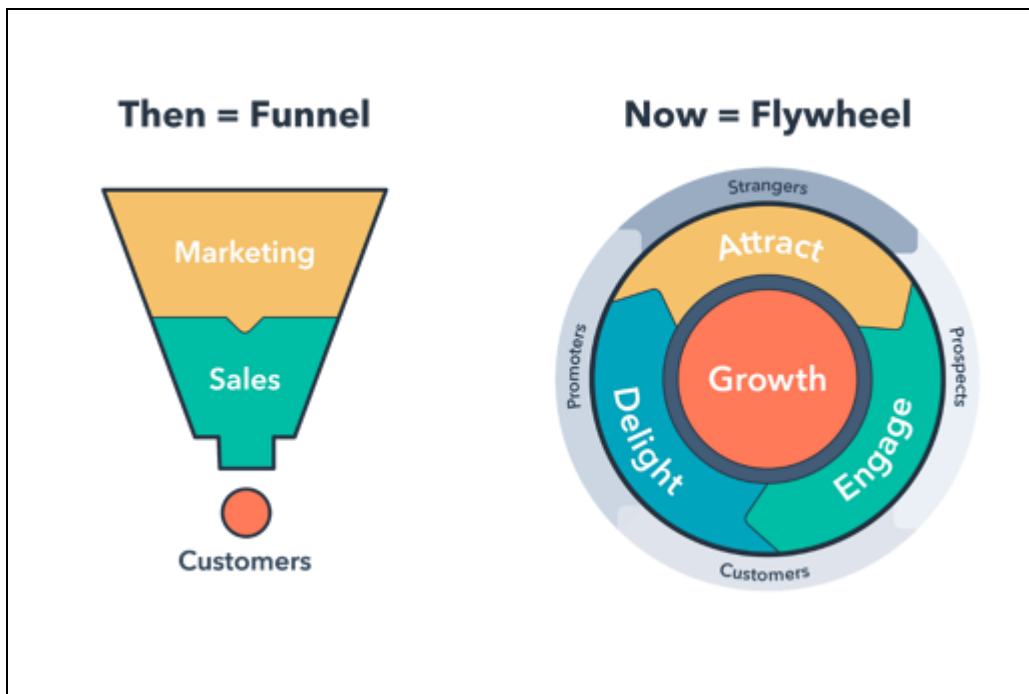
purchases, inbound marketing, and paid advertising are some of the forces that speed it up and keep it spinning. However, it can be slow down by disjointed teams, customer churn or other matters creating friction and affecting customers' satisfaction. Companies can use products like AI-powered analytic tools to identify friction points. Compared to the other models that put more force into the attracting/awareness phase and consider customers as an output with an endpoint, the flywheel invests more in the delighting phase and considers customers an on-going input; the most important tool that keeps the wheel spinning and contributes to the growth of the company. Although customers are key in keeping the flywheel moving, the company also needs to do the work.

It is important for marketers to understand how AI fits with the flywheel model. AI gathers information from users along all the touchpoints of the customer journey, from the channel that delivered the content that attracted them to the strategies of the company that are working and making them stay loyal. In other words, it collects and analyzes information to anticipate customer behaviors and actions and provides marketers with the insights necessary to attract, engage, and delight customers, personalizing each phase and delivering an outstanding customer experience (Schweigert, 2020). Moreover, analyzing the data collected, AI helps to establish omnichannel marketing, providing an integrated experience and unified messaging across all channels. The combination of both results in an outstanding customer experience with satisfied customers that keep the momentum of the flywheel going.

Companies that have an excellent understanding of their customers' journey and are using AI to enhance the process are achieving excellent ROI and an improvement of 85% in customer engagement (Microsoft Advertising, 2019). The implementation of artificial intelligence (AI) can enable the creation of more personalized experiences to delight customers and increase customer loyalty, identify the best channels and ways to engage with them to improve the customer journey, and find the things that make them tick to attract potential customers and

influence their purchasing decisions. AI systems get smarter with every customer interaction, so the customer experience is continuously optimized. Experiences become more personalized, interactive, and human.

Figure 9: Commercial Funnel vs Flywheel Model



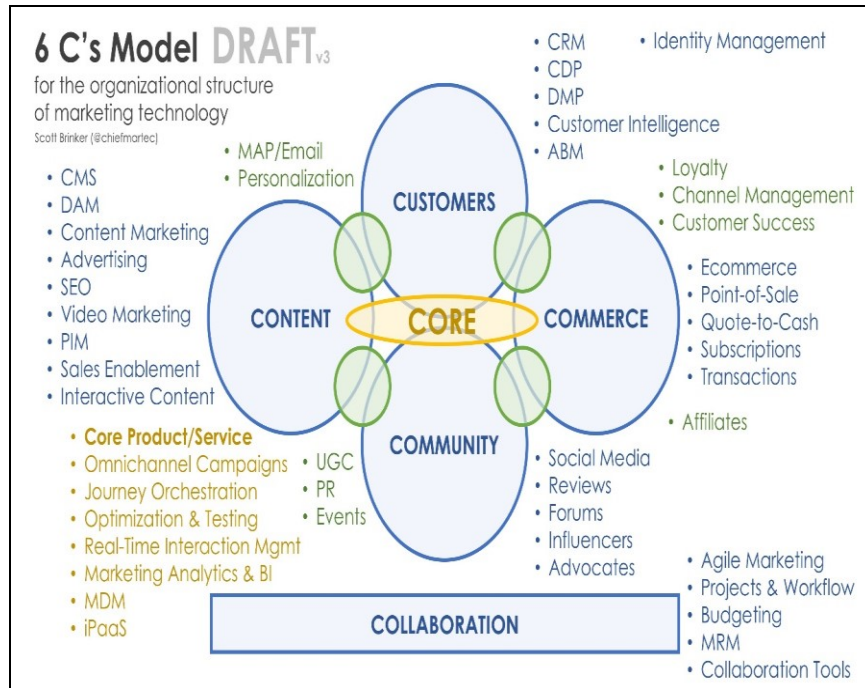
Source: Image from Hubspot's page. (Hubspot, n.d.)

3.4 The 6C of Marketing

In the first year of marketing, we learn the 5C's of traditional marketing (company, collaborators, customers, competitors, and context). Now, the magic number is 6. When looking up "the 6C's of marketing", we find 6C's for almost every type of marketing, from the 6C's of online customer motivation to the 6C's of social influence marketing. The common denominator among all is content and not customers, which should be the predictable term once knowing that everything revolves around them.

Scott Brinker, editor of chiefmartec.com and VP of HubSpot, proposed in 2017 a 6C's model to organize and simplify the broad and complex MarTech landscape. The domains are *customers*, data about them and prospects; *content*, created and distributed through marketing channels; *community*, communications and interactions between customers; *commerce*, sale of products and services; *collaboration*, linkage and cooperation between all marketing activities; and *core*, product/service, information and campaigns shared across all marketing departments (Brinker, 2017a). In this model, he showcases the marketing technologies that are related and contribute to each dimension, the organizational capabilities they enable when combined with other dimensions, and the connection between all of them that results in an integrated system, the core. According to this model, personalization occurs as an intersection of the content shared in different channels enabled by MarTech products, and customers' data, also managed and collected thanks to MarTech. Although companies can take Brinker's model as a base and starting point, each company should tailor it to its specific needs, considering the tools in its MarTech stack and its goals. In 2020, Deloitte presented its 6C's framework with the same purpose as Brinker's, to organize MarTech capabilities and elevate the human experience (Deloitte Digital, 2020). It took out the community and core dimensions, and inserted change management and campaign.

Figure 10: Bricker's 6C's MarTech Model



Source: Image from the Chief Martec blog (Brinker, 2017b)

3.5 The Role of AI

3.5.1 What is AI?

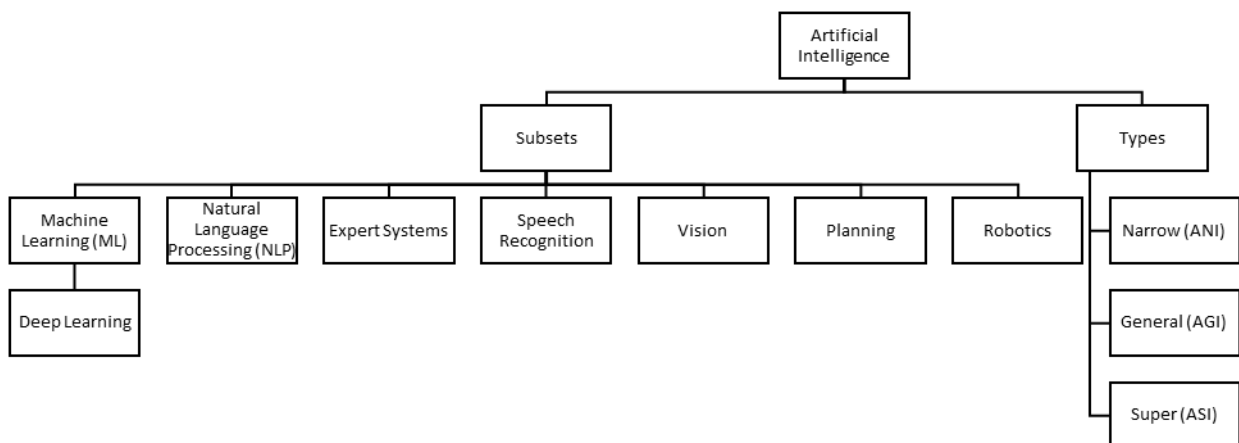
Artificial intelligence can help companies predict if a product is going to succeed, identify customer shopping patterns, design advertisements, write copies, and even perform customer-facing activities with robots or bots, faster and with better accuracy than with current procedures (Kotler et al., 2021). AI is the use of machines to mimic human skills, or as defined by the father of AI, John McCarthy (2007), "AI is the science and engineering of making intelligent machines, especially intelligent computer programs". Companies use AI in different ways: Mastercard in the form of natural language processing (NLP) in its Facebook Messenger bot (Mastercard, 2017) to automate handling payments, Uber for dynamic pricing (Uber, n.d.), Amazon to recommend additional purchases (Hardesty, 2019), and CaliBurger uses AI-enabled kiosks with facial recognition for customers to place orders and pay (Watrous, 2018).

There are many subsets of AI and three types of AI-based on their abilities (IBM Cloud Education, 2020). One of the most used subsets in marketing is machine learning (ML), the ability of machines to learn on their own, without being the need to be programmed, and find patterns. Deep learning is a subset of machine learning where machines learn from unsupervised unstructured data. While with supervised learning machines learn from tagged elements providing possible inputs and outputs, with unsupervised learning they learn from unlabeled data, discovering relationships and patterns with minimum human involvement. AI turns unstructured data, such as social media conversations, into structured data, identifying patterns that it can use to group customers and enabling companies to perform data-driven marketing segmentation and targeting.

Although there are various ways to classify AI, the most common approach differentiates three categories. The first type of AI is artificial narrow intelligence (ANI) or weak AI, systems designed to perform one specific task and whose

knowledge is not easily transferable. The second type is artificial general intelligence (AGI) or strong AI, systems with human-level intelligence capable of abstracting concepts and transferring knowledge. And the third type is artificial superintelligence (ASI), machines that surpass human intelligence. As of 2021, only ANI has been reached yet (Kotler et al., 2021). Some examples of ANI are customer service bots and voice assistants such as Amazon’s Alexa, Apple’s Siri or Microsoft’s Cortana, facial recognition tools that automatically tag people in photos or recommend similar products, Google’s ranking technology, and spam filters.

Figure 11: Subsets and Types of AI



Source: Prepared by the author

Thanks to the evolution of technology, companies are having access to much more data than ever before. Data volume is expected to reach 175.8 zettabytes (ZB) by 2025, 9.65 times the amount of data available in 2015 (Seagate, 2020). But raw data is overwhelming to work with, and even more when quantities are so vast, so companies need a tool to filter and analyze all this information. Marketing is controlling its collection of data through AI and ML models that are advancing rapidly and improving “no-code” tools (Penn, 2020), programming tools that involve

a graphic user interface (GUI) instead of writing code. These tools allow marketers to automate activities, introduce and exploit new analysis capabilities, and connect their different tools and data (Brinker, 2021), obtaining more accurate and faster results than humans.

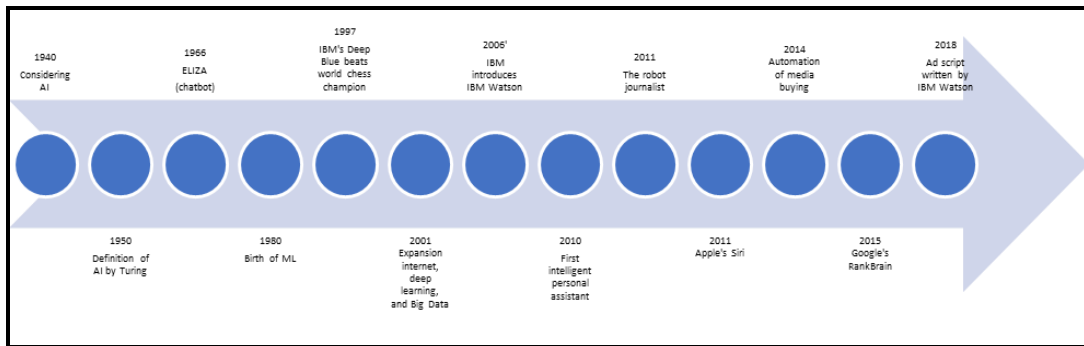
AI collects and analyzes data to understand human behavior to improve marketing and automate repetitive tasks so marketers can put their efforts into more complex ones. Marketers must verify and update data before using it as inputs, as machines will be trained with it and the output generated will be based on it. (Penn, 2018a) states that quality data has six characteristics, the 6C's of quality data: 1) clean and free of error, 2) complete, 3) comprehensive, 4) chosen, 5) credible, and 6) calculable. He also states that to succeed, marketers need to look at their KPIs, ask the right questions, and then select the best five metrics that can provide them with good insights and allow them to answer those questions. Machines identify patterns and humans the underlying motives behind customers' behavior (Kotler et al., 2017).

3.5.2 Paths in history

The concept of artificial intelligence was considered in the 1940s (Bush, 1945), nevertheless, it was defined for the first time in 1950 by Alan Turing (Turing, 1950). During the 21st century, it has gained more prominence due to the development of some enablers, of which we can highlight the evolution of the Internet, Big Data, and cloud computing (Kotler et al., 2021). In 1956, AI was established as a separate field of computer science, and in 1966 the first chatbot called ELIZA was created. Later on, machine learning arose. The expansion of the internet, the development of machine learning, and the consideration of all data for analysis, the Big Data, highly contributed to the evolution of AI, but it was in the 2010s, thanks to the progress in deep learning, that AI flourished. The momentum of AI kept going, a robot wrote sports news (NPR, 2011), IBM Watson wrote the script of an ad (Spangler, 2018), programmatic advertising buying was popularized, and Google improved search results considering user intent. In 2011, Apple launched Siri in its

iPhone 4s, the first intelligent personal assistant that would allow people to get things done using voice search queries (Apple, 2011). Facebook, Apple, Microsoft, Google, and Amazon (FAMGA) are key AI players. Not only in terms of development but also in the number of acquisitions of AI startups they are making that are allowing them to implement the purchased AI systems in their products (CBSInsights, 2019).

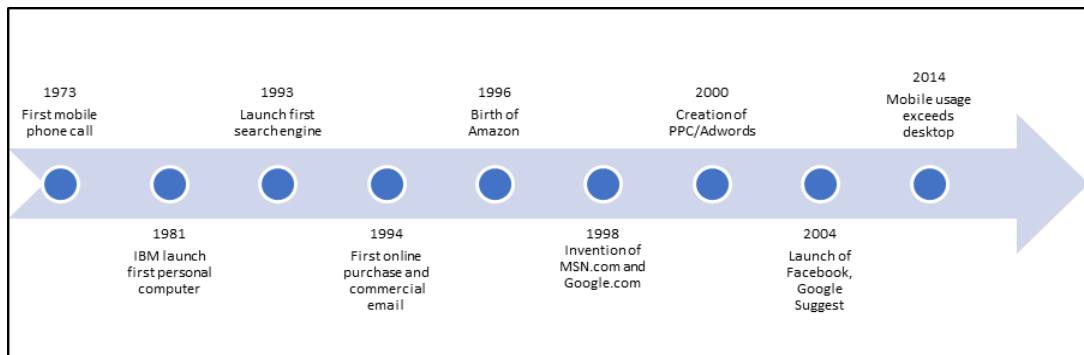
Figure 12: Key Events in the History of the AI



Source: Prepared by the author

Big Data was allowed thanks to the invention and growth of social media, email, messaging platforms, and the Internet, creating massive volumes of data every second (Kotler et al., 2021). At the end of the 90s, new technologies emerge, allowing to reach a wider audience, mobiles gain popularity, the first online purchase is made and, finally, Google is launched.

Figure 13: Relevant Marketing Events



Source: Prepared by the author

3.5.3 The 5P's of Marketing AI

In 2017, the creator of the Marketing Artificial Intelligence Institute, Paul Roetzer, designed a five-step framework to implement marketing AI technologies covering all the steps of the marketing process; the 5P's of Marketing AI (Roetzer, 2017).

1. **Planning:** building optimized strategies. In this beginning phase, companies can take advantage of AI to predict customer behavior, determining the allocation of marketing resources, discover keywords, performing customer segmentation, and predicting customer churn.
2. **Production:** creating content. From blog posts to emails and videos, AI can create content for all channels, ensuring consistency across all and enhancing the omnichannel experience.
3. **Personalization:** tailoring customer experiences. According to Roetzer, this is the phase where companies invest the most, indeed, almost every single company has some source of MarTech personalization tools. Some practical uses in this phase are chatbots, product recommendations, customized emails, and content.
4. **Promotion:** managing communications cross-channel and cross-device. AI-powered platforms in this stage help companies with improving email delivery, scheduling social media posts, adjusting digital ad spend, and performing better targeting and retargeting.
5. **Performance:** turning data into actionable information. In the last step, AI gathers all the data and analyzes it to provide insights, forecast performance, and perform lead scoring.

3.5.4 Uses of AI in Marketing

The main benefits of AI are acceleration, accuracy, and alleviation (Penn, 2018b). The use of AI in marketing automates processes and allows marketers to make more informed decisions. The use of artificial intelligence brings many benefits to

marketing, which are elevated when combined with a great understanding of their customers' journey, resulting in a 45% increase in the ROI/ROAS (Microsoft Advertising, 2019). The biggest outcomes marketers report to be achieving by using AI are accelerated revenue growth and improved performance, obtaining more useful insights about the consumer which allows them to deliver personalized experiences, scaling these personalized experiences, and reducing time on repetitive tasks making marketing more efficient (Drift and Marketing Artificial Intelligence Institute, 2021).

It can improve all steps of the customer journey with the right data, the right interpretation, and the right programming. Usually, companies use chatbots and personalized recommendations but there is so much more than AI can do (see table below). We have grouped some uses of AI in marketing into four benefits: personalization, understanding customer behavior, creating excellent customer behavior, and optimizing processes. The main goals marketers want to achieve using AI and ML are to predict consumer behavior and improve personalization (Microsoft Advertising, 2019).

Table 7: Uses of AI in Marketing

Personalization	Understanding customer behavior	Creating an excellent customer experience	Optimizing processes
Creating personalized content	Predicting customers behavior and campaigns performance	Enhancing omnichannel strategy	Automating social media content distribution
Improving customer service efforts (chatbots)	Identifying loyal customers	Identifying the most optimal channels to create new touchpoints	Improving ads bidding results
Enhancing tailored recommendations	Filtering social media feedback	Creating consistent messaging	Launching retargeting campaigns
Connecting with audience emotions	Providing dynamic pricing	Determining the next best action	Writing copy and scripts
Delivering personalized advertising	Performing sentiment analysis	Providing 24/7 personalized customer service	Identifying influencers
Recommending products using facial recognition	Predicting customers at risk of leaving	Enabling automatic real-time language translation	Detecting anomalies in data
Targeting with biometrics	Improving customer retention	Delivering fast accurate responses to customers	Performing lead scoring
			Optimizing media planning and buying
			Detecting anomalies

Source: Prepared by the author using several articles and one study: (Frost & Sullivan, 2021), (Payne, 2020), (Litsa, 2020), (Schweigert, 2020), and (Hobbib, 2020).

4. PRACTICAL PART

4.1. Starbucks

The information for this case has been obtained from the following sources: (Starbucks, 2020), (Warnick, 2020), (Panda, 2020), (Future Stores, n.d.) and (Rahman, 2021).

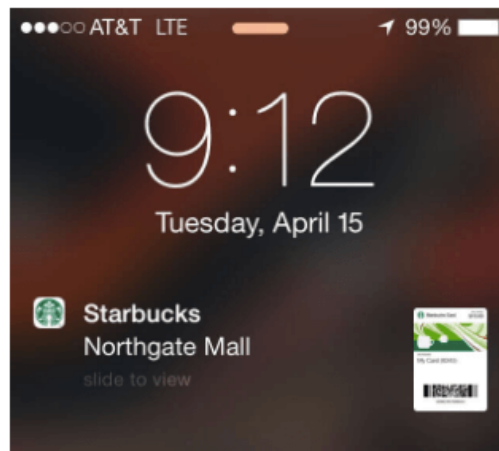
Founded in 1971, Starbucks is one of the companies that most focuses on delivering a unique experience. When you go to Starbucks you are not getting just a coffee, it is the environment, the music, the product, and the delightful greeting by the barista. The company is known for making its customers feel special and delivering an elevated customer experience, personalization has always been in its DNA. Customers can customize their drinks by changing the milk and adding extras, get their names writing in the cup, baristas remember their regular orders, and it creates a memorable in-store experience. Making the customer feel valued is Starbucks's motto and is what makes its customers pay a premium for a cup of coffee. With the evolution of technology and maintaining its emphasis on forging personal relationships with its customers, Starbucks has updated its strategy to deliver a personalized experience now in the digital world.

Starbucks launched its mobile app in 2009 only available on iPhones. This is the hub of the company's digital ecosystem and its most personalized system. At the time, it was a simple App to locate the closest Starbucks store and pay with a QR code. Later, the app was more personalized for each customer sending tailored suggestions with the help of an AI-based algorithm that analyzed the user information such as past activity and purchases. But now, it is hyper-personalized, considering contextual inputs such as the weather and time of the day to provide real-time relevant recommendations. This level of personalization is attainable by combining real-time big data with a data-driven AI algorithm. It can send targeted emails, suggest products to try based on customers' preferences and behaviors or

incentive them to buy with some discounts or giving them stars (Starbucks rewards points). The implementation of AI in email marketing, to compile and analyze customers' information from the app and reward cards, allowed the company to go from 30 to 400,000 personalized marketing emails available per week, offering real-time personalization (hyper-personalization) and increasing response rates by 200%.

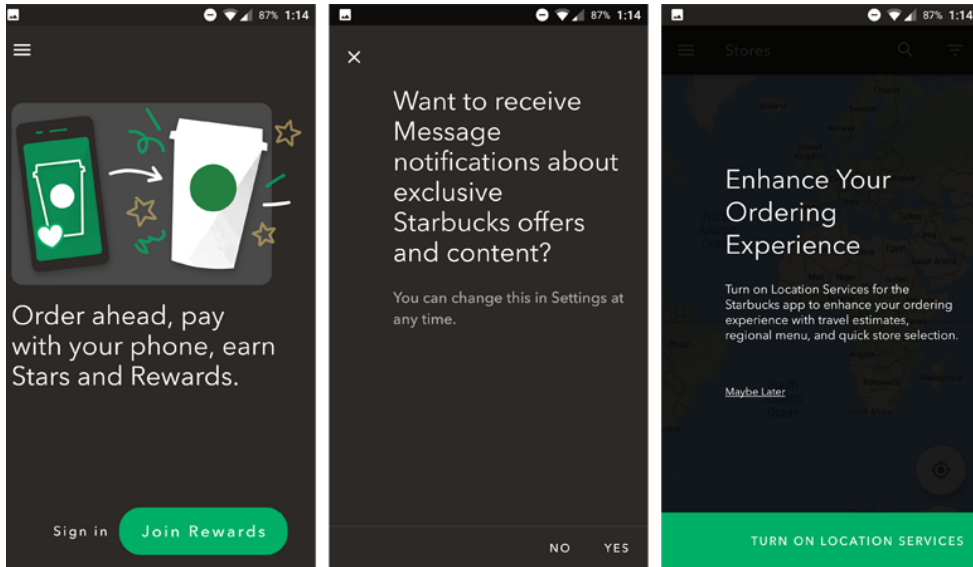
The app is enhanced with the Starbucks Rewards program with 21.8 active members in the US by January 2021 that make close to 50% of the revenues. It was designed leveraging the concept of gamification, the more visits, the higher points, and level. The games are also personalized with the collected customer data. Each “player” can choose its avatar and features, creating an emotional connection with the game, and receive suggestions based on past orders thanks to the use of AI. When combined with GPS, Starbucks also takes advantage of their customers' information and sends them notifications about stores close by that accept mobile orders. All these digital interactions merged with in-store visits create an omnichannel ecosystem that provides Starbucks with tons of information about its customers that are later analyzed and used to improve its personalization efforts delivering an integrated personalized experience.

Figure 14: Near Starbucks Store Notification



Source: Image from WebEngage website.
(WebEngage, 2018).

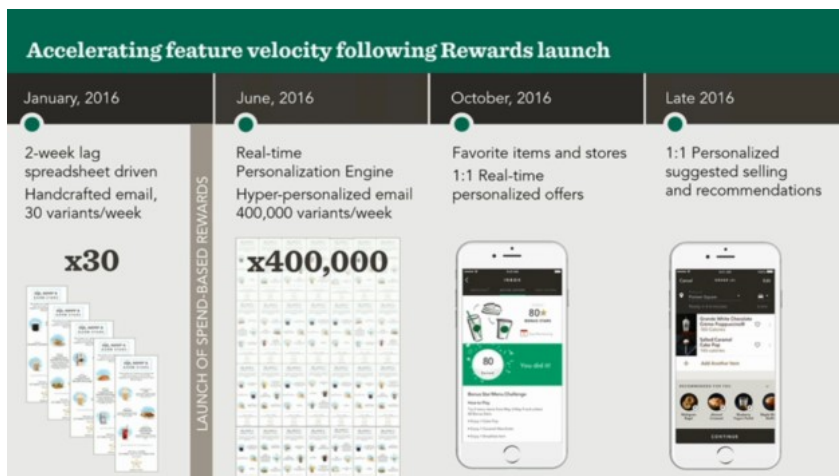
Figure 15: Starbucks App Signing Up Screens



Source: Image from Leanplum website. (LeanPlum, 2018).

On the December 2016 Starbucks Investor Day presentation, the company showed its plans of expanding its personalization and continue to bring digital in physical stores. It proposed using AI to provide customers with suggestions of coffee and products the customer may like, performing real-time analysis of the customer digital interactions and previous actions, when ordering through the drive-thru.

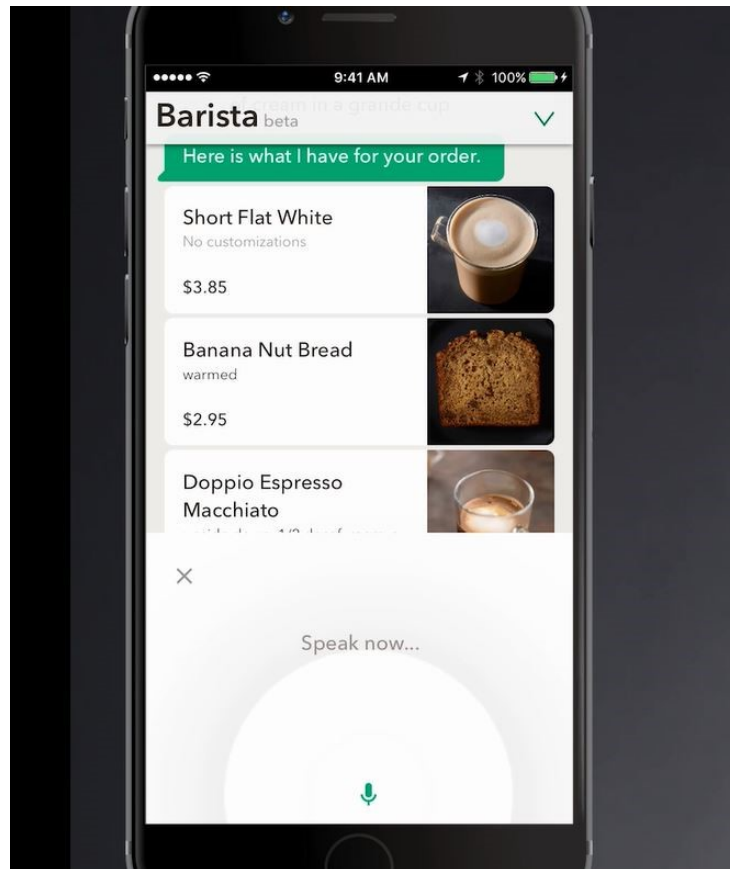
Figure 16: Personalization in the Starbucks App



Source: Image from Geek Wire website. (Starbucks, 2016a).

My Starbucks Barista chatbot debuted in 2017 for users to place orders using voice commands or the messaging interface. Powered with AI, the chatbot interacts with customers along the purchasing process and helps them place the order. The Barista recognizes what the customer ordered, asks follow-up questions, and finally verifies it and gives an estimated time of when it will be ready. It creates a seamless and delightful customer experience. Moreover, Starbucks partnered with Amazon to include the Starbucks Reorder skill in Alexa, allowing the customer to order their coffee by saying “Alexa, order my Starbucks”.

Figure 17: Starbucks Chabot (My Starbucks Barista)

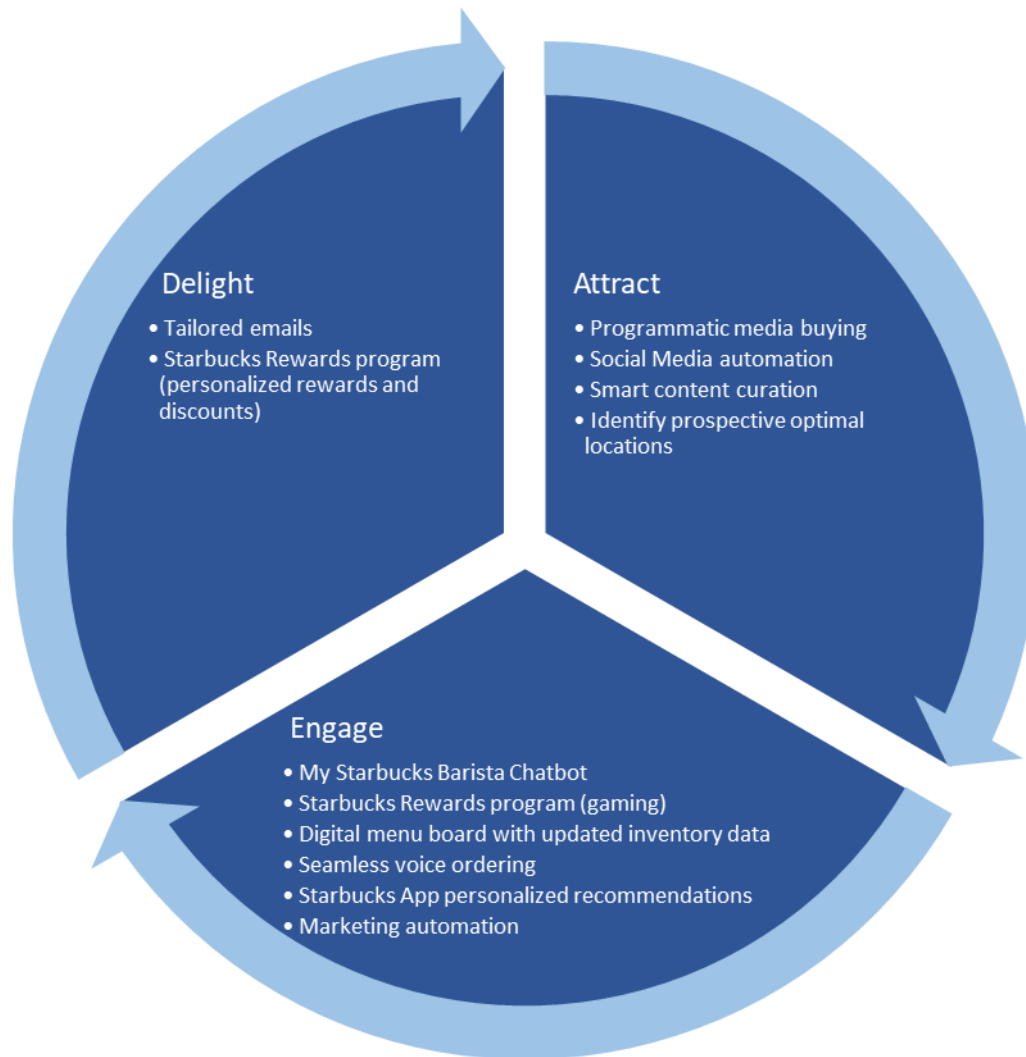


Source: Image from Starbucks website. (Starbucks, 2016b).

Starbucks CEO, Kevin Johnson, believes innovation should be taken place every 100 days. In 2021, the company has cross-functional teams to substitute its previous silos, and utilizes “data science and machine learning to inform process and product development”. “Deep Brew” is one of the latest initiatives of the company developed and hosted in Microsoft Azure. It harnesses AI and IoT technologies to increase the personalization engine, optimize workforce allocation, and efficiently manage store inventory. They have added Deep Brew AI combined with IoT in their new Mastrena espresso machines with integrated sensors that keep track of every coffee made. It collects every detail about the coffee made, from the drink temperature and water quality to the type of beans used. These data will later be used with predictive analytic purposes to improve the machines, predict when they need maintenance, and get insights about customers' consumption habits to improve personalization. Starbucks is also using AI strategically to improve its operations and find the best locations to open its next stores avoiding cannibalization.

Unlike other quick-service restaurants, Starbucks prioritizes customization over speed, so while other companies are narrowing the options provided, Starbucks keeps expanding its menu. Customers do not expect, neither demand, the speed other chains provide because they know Starbucks has a different value. However, the company is trying to improve its efficiency with its Deep Brew AI-powered digital screens.

Artificial intelligence is helping the company to deliver better personalization and improve efficiency with more human interaction, following its mission statement: “to inspire and nurture the human spirit”.

Figure 18: The implementation of AI in Each Stage of the Flywheel Model (Starbucks)

Source: Prepared by the author

4.2. Disney

The information for this case has been obtained from the following sources: (Grossman, 2020), (Rayo, 2019), (Jaekel, n.d.), (Wired Insider, n.d.), (Stokel-Walker, 2020), (The Leadership Network, 2016), and (Gaffney, 2018).

Founded in 1923, The Walt Disney Company is one of the largest and most well-recognized entertainment companies in the world. The company is composed of four business segments and all of them use some source of AI to improve their operations.

Table 8: Application of AI in Disney's business segments

Business segment	Applications	Tools
Media Networks	Automatically tag content and characters with metadata	AI, ML, deep learning
	Serve tailored content using metadata	AI, ML
Parks, Experiences, and Products	Compile and analyze guests information	AI-powered MagicBand, RFID, long-range radio technology
	Interaction of guests with digital humanoids and Animatronics in character	AI, MR, AR, haptic sensors
	Interpret and analyze human behavior to improve Animatronics	AI, NLP
	Allow the audience to communicate with characters online	AI-powered Chatbot, NLP
Studio Entertainment	Analyze audience response to movies	AI, facial recognition
	Improve movie quality eliminating noise	AI
	Predict quality of short story narratives	AI
	Create more realistic quality in animated movies	AI
	Separate characters from the surroundings	AI, ML, Amazon Web Services (AWS)
Direct-to-Consumer & International	Automate and optimize media buying	AI

Source: Prepared by the author

In this case, we are going to study the use of the Magic Bands at Disney's parks, inside the Parks, Experiences, and Products subdivision.

The parks of Walt Disney are considered by many the most magical place on earth. Since the opening of the company's first park in 1955, the use of technology has always been present in the attractions and everyday operations.

Each of the parks welcomes over 50,000 visitors daily that expect to receive a magical experience, and Disney goes above and beyond to make this possible. Starting with the terminology they use at the park, employees are called cast members, and customers are referred to as guests, the company creates an immersive experience transporting them to another world. To remove any possible friction points, Disney introduced MyMagic+, an initiative to group all aspects of the Disney experience in a seamless system, creating the best experience possible for the guests. It was developed in collaboration with outside partners (Accenture and HP) using data analytics and smart technology. MyMagic+ touches all points of the customer journey with its two components: My Disney Experience app and the MagicBands.

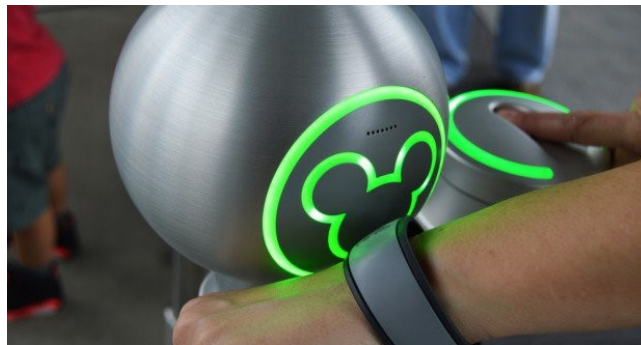
My Disney Experience app is the mobile app that allows guests to make dining reservations, book FastPass tickets that are later redeemed with the MagicBand, and check the wait time of the attractions. As well as to get daily itineraries, after selecting the restaurants, meet and greets, and attractions they want to visit each day.

One of the objectives of the company was to reduce the waiting time, increasing customer satisfaction, and allowing guests to spend more time in other offerings of the park. A strategic tool Disney has used to gather the necessary insights to improve the customer experience in the parks and resorts is a bracelet device. This device gathers tons of data that creates more homogeneous traffic of visitors

between the attractions, the shops, and the restaurants, allowing for more efficient use of the park and increasing the revenues.

Introduced in 2013, the MagicBand is a bracelet that guests can purchase for \$14.99 and it stores their information. It integrates RFID and long-radio technology that communicate with sensors located around the park and allow real-time data analysis. Guests can use it to enter the parks, unlock their Disney hotel room, save their photos, and charge purchases to their account. Every action provides Disney with data that allows the company to manage the movements of the visitors in the park. This helps to identify crowded spots and ease congestion around them driving guests to other places. The bracelet also allows the company to deliver a personalized experience in real-time, going on step further with hyper-personalization. For example, cast members can greet guests by their name, maybe in the future interact with them knowing some personal details they shared in the online platform, humanizing the experience. Moreover, this collection of Big Data is compiled in a platform based on Hadoop, MongoDB, and Cassandra, and it allows marketers to understand customer behavior and make personalized offers with the help of artificial intelligence and predictive analytics. Imagine the favorite character of a child greeting him by his name at the Main Street or getting personalized discounts when you get to the resort or even at the park if the system identifies you've had a long waiting time in an attraction.

Figure 19: Disney's MagicBands



Source: Image from Disney Tips (2015)

In the Shanghai park and resort, guests can use their smartphones to perform the tasks of the MagicBand, however, MagicBands are more convenient for guests as they are carried in their wrist all the time without the need of worrying about keeping another device. Disney can use both channels for data collection, so it does not affect its efforts.

In the upcoming years, the company expects to include Disney characters in the form of AI-powered Animatronics that interact with guests at the parks, elevating the customer experience to a whole new level.

Figure 20: The implementation of AI in Each Stage of the Flywheel Model (Disney)



Source: Prepared by the author

5. CONCLUSION

In the Marketing 5.0 era, companies combine the focus on the consumer with the use of technology to reach their goals. The use of technological tools that compile and analyze vast amounts of data is extremely useful for companies now that 5 generations are living together, and each presents its own characteristics. Besides, customers are savvier and more likely to change their behavior, so technology provides insights to learn how to better serve them. Currently, there are over 8,000 technological tools specifically designed for marketing purposes, demonstrating the growing importance of technology in marketing. They are mostly used for two purposes: understanding the customer and automation.

Artificial Intelligence became a technological trend with the development of machine learning in the 2010s and it started to gain traction in marketing thanks to the combination of new emerging technologies that enhanced its value and the growth of big tech corporations, that still play a major role in AI.

By analyzing customers' data, AI can predict their behavior and needs, providing the company with the insights necessary to anticipate its customers' next action and improve the customer journey. AI helps to establish omnichannel marketing, integrating information from all channels. Moreover, supporting the customer-centric approach, it analyzes all touchpoints of the customer journey to increase personalization efforts that strengthen the relationship with customers and conversion rates. All big corporations are investing in personalization and delivering customized content because it has been proved that customers want relevant content and that they are more likely to stay loyal to companies that provide it. This directly impacts the new funnel of marketing, the flywheel model. Providing an outstanding customer experience with personalization enhanced by omnichannel marketing is the key to make customers happy and increase positive word of mouth, attracting more customers. They are delighted with their experience

and this keeps the flywheel going. Personalization is king and AI can make it happen.

Nowadays, customers are used to having everything in a matter of seconds. If they have a question, they can look it up on their phone and get an answer in a matter of seconds. This need for fast responses and fast information has made marketers automate some of their tasks, which is possible thanks to AI. Indeed, automation is crucial for delivering fast personalization and reaching customers across all marketing channels. Although AI is mostly used for automation and personalization purposes, it can fulfill other objectives such as adjusting the price to the location or season, communicating with customers in the form of a chatbot, or creating digital content. However, it reaches its full potential when combined with other technologies, creating an immersive experience, and elevating the customer experience.

Companies get benefited from the use of AI because when improving their customers' journey, customer loyalty and sales increase. They can also use it to adapt to the fast pace of digital transformation, enhancing their agility and becoming more efficient, and automating tasks for their employees so they can focus on more complex tasks.

Artificial Intelligence has a good prospect over the years to come. The use of technology keeps growing and so do the people that have access to it. We are still in the first level of intelligence these machines can acquire so there is a lot of room for research and improvement to be done. Regarding marketing, AI will continue to help companies achieve their goals. It will get a deeper understanding of human behavior, even emotional, furthering hyper-personalization, and it will improve online and in-store processes.

6. FUTURE RESEARCH PROJECTS

A possible future line of research is the use of AI for understanding human behavior, already being studied combined with facial recognition tools and NLP. A second line could be the impact of AI-powered robots or more developed chatbots that guide customers during the online purchasing process. Moreover, it can be analyzed in more detail the use of AI in the different points of the customer journey and how it can enhance the flywheel, as it continues to gain potential with the years. Lastly, as AI creates many concerns about ethics, privacy, and the loss of jobs, some future research projects could investigate how AI can create a safe space with ethics as an input in the process.

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