Marketing innovations in the face of the digital revolution and the push of emerging technologies

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Abstract

This article aims to analyze the evolutionary process of marketing from the intense changes in social and consumption patterns and the use of new advanced technologies. Therefore, a bibliographic research was carried out, with the intent to understand not only the progressions in marketing strategies and activities throughout history, but also their current stage, intrinsically linked to issues of humanization, digitization, technological innovations and building new consumer experiences based on a new hybrid world. From the analysis of the new context in which companies at a global level are making the transition from traditional marketing actions to digital marketing, it was possible to conclude that new emerging technologies have great potential for a more accurate understanding of consumer needs, obtaining insights and strategic guidelines on the market that optimize the decision-making process, segmentation and selection of target markets, building new consumer experiences and strengthening brand building and growth results.

Keywords: Marketing; Emerging technologies; Society 5.0; Consumer market; Digitization.

1. Introduction

As a function or set of processes that allow the creation, communication and delivery of values to customers, partners and other employees and actors in the production chain, marketing is a modern force in the largest markets and nations and has become the main connection between companies and organizations – of all types and sizes – and their target audiences (KITCHEN; SHETH, 2016).

Marketing has followed the intense transformations in social and consumption patterns, mainly due to the

mass use of the internet, and is currently consolidating itself within a profile focused on the digital environment, in which the search for meeting consumer demands in a new hybrid world, with physical and virtual experiences, follows the line of popularization of equipment such as computers and smartphones, as well as the use of emerging technologies and analytical tools that obtain behavioral insights that can be transformed into orientations and market advantages (EREVELLES; FUKAWA; SWAYNE, 2016; MIKLOSIK et al., 2019).

This is the first time that five generations live on the planet with different attitudes, preferences and behaviors. Generations Y and Z, for example, currently form the largest consumer market in history, so corporate strategies are being designed and shaped to the preferences of these generations. Thus, in order to gain agility and provide a real-time response to market changes, companies are increasingly seeking to rely on the strength of advanced technologies to implement their marketing tactics and operations (KARTAJAYA; KOTLER; SETIAWAN, 2021).

In this context, the general objective of this article is to analyze the evolutionary process of marketing from the intense transformations in social and consumption patterns and the use of new advanced technologies, briefly demonstrating the current stage of marketing practiced at a global level and its main characteristics, which are intrinsically linked to issues of humanization, digitalization, technological innovations and the construction of new consumer experiences based on a new hybrid world.

In order to achieve the proposed objective, a research was carried out on the basis of scientific articles indexed to the Portal of Periodicals of the Coordination for the Improvement of Higher Education Personnel (Capes), as well as in publications by specialists in the area and Internet portals, in order to collect and analyze content related to Marketing, emerging technologies, Society 5.0 and the consumer market, among other topics related to the study.

2. Marketing

In general terms, marketing can be defined as the effort to plan and execute the conception, promotion and distribution of ideas, goods and services to clients and consumers of different sizes. In this sense, it includes the marketing of goods, services, experiences, events, people, places, properties, organizations, information and ideas. The essence of marketing is the development of relationships in which organizations and customers voluntarily participate in transactions designed to bring benefits to both, satisfying individual and organizational goals (CHURCHILL; PETER, 2013; KOTLER; KELLER, 2019).

Additionally, marketing can also be conceptualized as an activity or set of processes used to create, communicate, deliver and offer exchanges that have value for consumers, customers, partners and society in general. Its core functionality is to understand how products and services can satisfy customers and build profitable and long-term relationships between organizations and their audiences more effectively than competing groups. In one sphere, there are customers, with their needs, desires and demands, and in the other, there are organizations, interested in delivering products or services that can be valued and consumed by their customers (AMERICAN MARKETING ASSOCIATION, 2017; CACCIOLATTI; LEE, 2016; KOTLER; KELLER, 2019).

Performing marketing within companies and organizations is an action aimed at creating value for customers and achieving institutional objectives, including developing marketing plans and strategies, analyzing customers and markets, developing marketing mixes, and implementing and controlling marketing activities (ARNETT; WITTMAN, 2014; CHURCHILL; PETER, 2013).

3. Evolution of marketing in the face of the new digital age

As society and consumption patterns evolve, marketing has also changed and improved over the last few decades. According to Kartajaya, Kotler and Setiawan (2010), since the 1950s, marketing has moved from a strategy essentially centered on the product and sales, of a tactical nature (Marketing 1.0), to start prioritizing the consumer and their satisfaction (Marketing 2.0) and later, in reaction to new social and environmental dynamics, expand the focus to issues of humanity and corporate responsibility (Marketing 3.0).

These three stages of marketing can be considered as the complete cycle of traditional marketing, with the pursuit of meeting the demands of customers and consumers, respectively, intellectually, emotionally and spiritually. The need to meet consumers' journeys in a new hybrid world, with physical and virtual experiences, has led to the evolution of marketing from its traditional form to a new digital format, causing companies and organizations to adopt digitalization fundamentals in their marketing activities (KARTAJAYA; KOTLER; SETIAWAN, 2021).

Figure 1 presents a summary of the evolution of Marketing over the years.

The Feature	Marketing 1.0	Marketing 2.0	Marketing 3.0	Marketing 4.0
Concentration	Product-oriented marketing	Consumer-oriented marketing	Marketing oriented towards people	Human-centered marketing deepened by the client's "journey" in the shopping process
Aim	Sale of products	Satisfaction and customer retention	Making the world a better place, providing positive values	Inspiring the client to co-create new content and products/services
Forces enabling the emergence of a concept	Industrial Revolution	Information technology	A new wave of technologies	Digital economy
The way companies perceive the market	Mass customers with material needs	Intelligent customers driven by reason and emotions	A man with reason, heart and soul	Netizen man (citizen of the network)
Key marketing concepts	Product development	Diversification and distinction on the market	Providing higher values	Anthropomorphization of brands
Marketing guidelines	The specificity of the product	Positioning the company and product	Mission, vision and company values	Promoting content and creating brands
Value proposition	Functional	Functional and emotional	Functional and emotional and spiritual	Commitment and trust
Interactions with consumers	Collective approach, one-to-many transactions	Individual approach, one-to-one relations	Relationships and cooperation "many to many"	Relations based on the functioning of the networking, an enormous generation of consumers

Figure 1 – Marketing Phases (1.0 ao 4.0)

Source: Kartajaya, Kotler and Setiawan, 2016; Kartajaya, Kotler and Setiawan, 2010

The creation of the World Wide Web by scientist Tim Berners-Lee, in 1990, popularized the internet as a worldwide computer network in which information could be published and accessed by a diverse audience, thus revolutionizing the business world with the great novelty of instant access to data about products and services. More than 25 years after the commercial use of the Internet and the World Wide Web began, the business environment around the world has changed at an intense pace, and now, multinationals such as Google, Facebook, Amazon, Alibaba, eBay and Uber, among others, have become protagonists of the modern economy and shown how new organizations should value the creation of a digital relationship with their customers (KANNAN; LI, 2017; REZ, 2017; TORRES, 2018).

Limeira (2012) highlights that the adoption of digital marketing as a competitive tactic will give rise to new business opportunities and possibilities to attract and retain customers, through representative advances in information and communication technologies and, especially, the internet environment.

For Torres (2018), consumers took control and production of information, through blogs, forums, social networks and many other online applications. Understanding that this change in behavior brings challenges related to communication is imperative for the survival of companies in the market.

According to Dash, Kiefer and Paul (2021), influenced by the rise of the internet, consumers currently participate as ambassadors for companies' products and brands, taking an active role in creating new demands and trends and influencing the market to behave more dynamically and conscious. As for Kartajya, Kotler and Setiawan (2016), the consumer has never been as powerful as it is today.

4. New stage: Marketing 5.0

In a society that increasingly prioritizes human issues, marketing has reached its "5.0" stage, evolving mainly in the face of technological innovations and also in response to the new global socioeconomic context caused by the Covid-19 pandemic. The pandemic caused significant changes in people's lives and gave rise to the implementation of social isolation strategies and restrictive measures such as quarantines and lockdowns; with this, the digital world gained even more strength (KARTAJAYA; KOTLER; SETIAWAN, 2021).

Faced with the challenges of modernity, marketing needs to have its processes and strategies remodeled not only due to the evolution of devices and digital technologies, but also to their potential impacts on the habits and preferences of modern consumers. Currently, the focus on people's demands and problems changes the way companies need to face the challenge of establishing relationships and communicating with consumers. Understanding technological changes is also vital for marketers, especially because innovations are powerful growth engines with the ability to strengthen brands and form market leaders (KANNAN; LI, 2017; SOOD; TELLIS, 2005; TORRES, 2018).

Also according to Kartajaya, Kotler and Setiawan (2021), the market is undergoing an intense process of cultural transformation, in which consumers increasingly choose to purchase products and services from companies that are concerned with representing them and defending appropriate values. Managers, decision makers, leaders and marketing professionals, among others, have the important role of defining how the brand will position itself in the market, demonstrating to employees, customers and other stakeholders that the company is committed to supporting good causes and perform social responsibility and environmental responsibility

actions. With this, the purpose is to achieve in a broader and more effective way the objectives of the new marketing format, which are: reach the emotional side of the customer; retain brand ambassadors; use sensory marketing to reach the five senses of the consumer; engage the customer through innovation and technology; educate to use the product or service; and unite technological resources with humanization (KARTAJAYA; KOTLER; SETIAWAN, 2021).

In this new context, Kartajaya, Kotler and Setiawan (2021) also point out that new digital tools and technologies, such as Artificial Intelligence (AI) and algorithms; marketing automation; robotics; sensors and the Internet of Things (IoT); virtual (VR) and augmented (AR) reality; natural language processing (Siri, Alexa); chatbots; neuromarketing and brain science will be used even more deeply by marketers to bring greater enrichment to the user journey and experience, in the sense of mitigating negative aspects and fostering significant impacts on the market and society (KARTAJAYA; KOTLER; SETIAWAN, 2021).

Figure 2 describes the five main elements related to the new global marketing format.
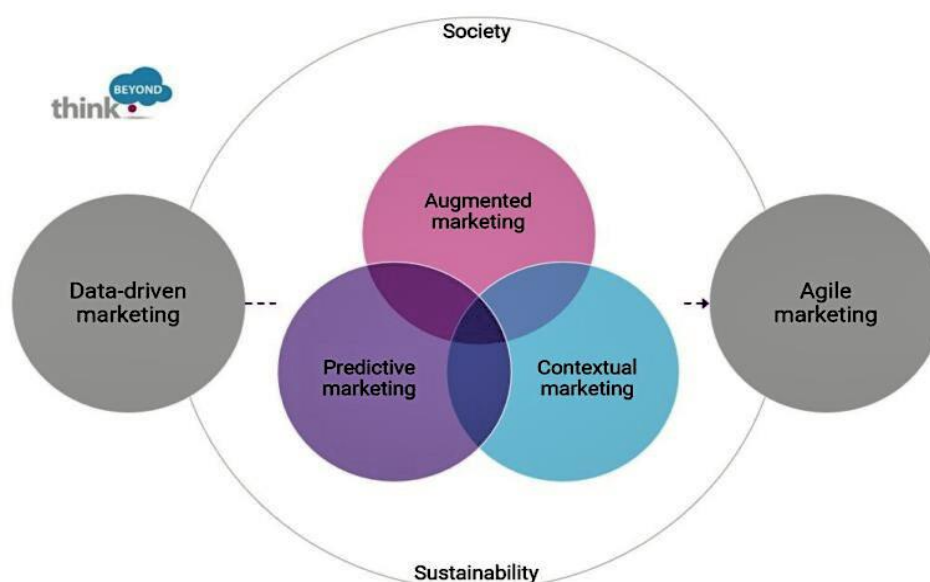

Figure 2 – Five Elements of Marketing 5.0
Source: Think Beyond (2021)

Finally, according to Kartajaya, Kotler and Setiawan (2021), it is imperative that technology be at the service of strategy. The goal is to create a compelling, friction-free new customer experience (CX). For this, it is necessary to leverage a balanced combination between human and computer intelligence.

5. New technologies at the service of marketing

Decision making in marketing management is being revolutionized from the large volume of processed data, the impressive speed with which this data is generated and the enormous diversification of existing data. Marketing, therefore, increasingly uses advanced analytical tools, driven by the use of emerging technologies, to

contribute to the systematization of processes, streamline decision-making and automate operations (EREVELLES; FUKAWA; SWAYNE, 2016; MIKLOSIK et al. al., 2019).

The so-called Big Data revolution, with unprecedented volume, speed and variety of data available from individual consumers, gives rise to pioneering ways to understand consumer behavior and formulate marketing strategies (EREVELLES; FUKAWA; SWAYNE, 2016). Driven by the popularization of social networks, virtual media, e-commerce and collaborative business, the explosion in the amount of data is a positive trend that brings great opportunities, however, many companies still face internal challenges or limitations to transform the large amounts of data into complex decisions that result in commercial advantages (MITHAS et al., 2013). The advent of Big Data and the exponential growth in the breadth and depth of consumer data are radically changing the face of segmentation and the selection of target markets (DASH; KIEFER; PAUL, 2021). In the current digital age, the amount of data is no longer a central issue; instead, what is more relevant is the identification of those data that matter for decision making (KARTAJAYA; KOTLER; SETIAWAN, 2021).

Artificial Intelligence, sensors, robotics, AR, VR and IoT are among the emerging technologies that drive the new format of world marketing, which represents the application of techniques and tools that imitate the human being to create, communicate, deliver and increase value for customers in all their experiences (DASH; KIEFER; PAUL, 2021). Other emerging technologies that are also already impacting or will impact marketing more effectively in the near future include computing techniques and analytical methodology, cloud computing, cognitive computing, Big Data Analytics (BDA) and machine learning techniques (ML) and deep learning (KANNAN; LI, 2017).

Analytical tools serve as an important source of information for marketing management and also bring several benefits to the strategic decision-making process, such as market mapping and knowledge about competitors' activities, high capacity for audience segmentation and the possibility of tracking data in real-time on ongoing communication campaigns. Machine Learning also occupies a prominent place in the work of marketing specialists. With the progressive increase in the volume of data, deep learning is playing a key role in helping predictive analytics solutions for Big Data, particularly with advances in graphics processors (CHEN; LIN, 2014; MIKLOSIK et al., 2019). Knowledge about consumers has become an essential item to achieve the benefits that Data Analytics – or BDA – generates on the performance of marketing activities. Big Data technologies and advanced Data Analysis techniques have reconfigured marketing approaches to offer insights and strategic guidance on the market (KAR; DWIVEDI, 2020; UPADHYAYA; KUMAR, 2020).

Big Data analysis has provided pioneering ways to obtain information from consumers and markets. All four main categories related to strategic marketing decisions (product, price, place and promotion) can be optimized using both internal and external corporate data. The main reason for companies to use Big Data, therefore, becomes the ability to obtain the data to facilitate or improve the decision-making process. There are three areas in particular where the effective use of Big Data and its combination with a well-aligned marketing strategy can have the most significant impacts on a company's business: customer engagement; customer retention and loyalty; and marketing optimization and performance (TYKHEEV, 2018; MAHESHWARI, 2014). Worldwide, many business sectors are making large investments in developing their Big Data Analytics capabilities to generate faster decision-making as well as more effective marketing performance, particularly with

regard to understanding the consumer needs (SHIRAZI; MOHAMMADI, 2019). Currently, it is possible to affirm that the ability of a company to use BDA technologies interferes directly and indirectly in its performance. This technology has been fruitful for companies to improve their ability to generate profit, increase operational efficiency and increase marketing performance in the short and long term (RIALTI et al., 2019). According to Kartajaya, Kotler and Setiawan (2021), the data used for analysis come from different sources: Social data, which includes information shared on social media such as location, demographic profile and interests; Media data, involving audience measurements in traditional media, such as television, radio, press and cinema; Web traffic data, through logs generated by users browsing the web, such as views, searches and purchases; Point-of-sale and transaction data, including records of consumer transactions and movements; Internet of Things data, which involves data collection by connected devices and sensors; and Engagement data, which represent direct contact points between companies and customers, such as call center data, email exchanges and chat data (KARTAJAYA; KOTLER; SETIAWAN, 2021).

Figure 3 demonstrates the diversity of sources for obtaining data through Big Data.
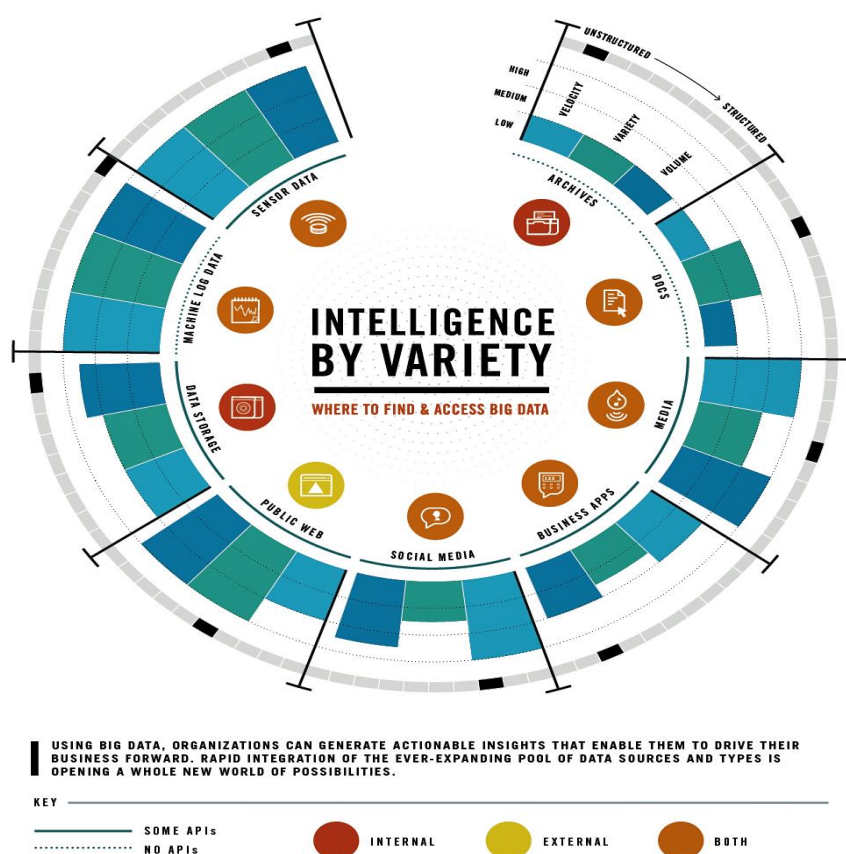

Figure 3 – Variety of data acquisition by Big Data

Source: Column Five Media (2018)

Other technologies such as the Internet of Things and Artificial Intelligence have also collaborated to reinforce human situational awareness, in the view of Kartajaya, Kotler and Setiawan (2021). The marketer with

knowledge of these technologies can achieve the ideal goal, which is to deliver the right product to the right customer, at the right time, and in the right place. The mission is to deliver, with the help of IoT and AI, a large-scale contextual experience. In the case of the Internet of Things (IoT), for example, the customer's home – from the security system to home entertainment and home appliances – is fully connected to the internet. Therefore, the advent of the smart home, in itself, provides a channel for marketers to promote products and services directly where the customer resides, which helps marketing to get even closer to the place of consumption (KARTAJAYA; KOTLER; SETIAWAN, 2021).

6. Conclusions

Since its inception, marketing has remained a methodology based on market studies and all of its most significant components, seeking to understand consumer behavior to justify the proposition of new solutions and ideas aimed at the market.

This article aimed to briefly demonstrate the evolution of marketing practiced at a global level and its main current characteristics, which are intrinsically linked to issues of humanization, digitalization, technological innovations and the construction of new consumer experiences based on a new hybrid world.

The impacts of digital transformation on people's lives and companies, as well as the reflexes of new consumer journeys caused by the evolution of consumer awareness, led to the creation of a new approach to global marketing, which values the conciliation between the use of advanced technologies and the necessary strengthening of the humanitarian aspects of the brands.

The new format of world marketing follows the advances of society and the most impacting changes in the formats, purposes and orientations of the consumer market. Companies must intensify their digitalization processes, as well as accelerate the implementation of new technologies and innovations, to reinforce their actions and seek to fully satisfy the demands and needs of new consumer groups, increasingly segmented, demanding and empowered. This is the present of most companies (and the near future of some of them), in order to take advantage of all the benefits brought by the digital revolution in order to establish more effective relationships, strengthen the construction of their brands and increase results.

Emphasis is given to the fact that, as the pace of change in technologies, markets, competition, regulations and the flow of inputs increases, and as more of these factors become significant to the marketing success of a product or specific service, the complexity and speed with which a company incorporates new technologies must accelerate. It is important that marketing techniques adjusted to current consumption patterns and new advanced technologies work collectively to generate brand value and profitability.

Therefore, it becomes imperative that modern companies and organizations practice creativity, experimentation and technological improvement to survive in an increasingly changing and challenging market. As presented in this article, and also according to Kartajaya, Kotler and Setiawan (2021), the time has come for companies to fully unleash the power of advanced technologies in their marketing strategies, tactics and operations.

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