

Overcoming the Dark Sides of Artificial Intelligence

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Abstract

This chapter explores the development, classification, and application of artificial intelligence (AI), with a particular focus on its ethical implications and the so-called “dark sides.” It outlines different types of AI—such as weak, general, and super AI—and their levels of autonomy, emphasizing the extent to which human intelligence can be mimicked. The chapter examines how AI technologies, especially in the field of marketing, enhance customer experiences through personalized recommendations, while simultaneously raising concerns regarding data privacy, manipulation, and unethical practices like fake reviews. It argues that sustainable marketing requires building customer trust by adhering to ethical principles, including transparency, informed consent, and legal compliance. The discussion concludes that overcoming the dark sides of AI will enable businesses to establish long-term customer relationships, foster brand loyalty, and create greater brand value through ethical, value-driven AI applications.

The Dark Side of Artificial Intelligence

Artificial intelligence is defined as imitated human intelligence that does not have to be limited by biologically observable methods (McCarthy, 2007:2). Artificial intelligence, which is related to the simulation, expansion and dissemination of human intelligence, is considered as a sub-field of computer systems (Shi and Zheng, 2006:810). The world of the 21st century, guided by technological developments, has created the concept of artificial intelligence by imitating human intelligence, and artificial intelligence has become one of the important elements of daily life thanks to its advanced memory and data processing ability.

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According to Morandín-Ahuerma (2022:1948), there are different types of artificial intelligence. Based on their cognitive aspects, they are classified into three types: weak or limited artificial intelligence, general or strong artificial intelligence (AGI), super artificial intelligence (ASI), and according to their autonomy, they are classified into four types: reactive artificial intelligence, thinking artificial intelligence, cognitive artificial intelligence and autonomous artificial intelligence. Weak or limited artificial intelligence is a system that can perform specific actions quite well, while strong artificial intelligence is a system that can think like a human, imitate common sense and empathy based on general knowledge (Sterne, 2017:10; Binbir, 2021:317). Super artificial intelligence is also called high-performance artificial intelligence. Although it fulfills all tasks that require human intelligence, it has the ability to surpass humans in terms of cognitive and learning abilities (Tzimas, 2021; Morandín-Ahuerma, 2022:1949). Reactive artificial intelligence is the type that produces an output depending on the input it receives. As long as the input remains the same, the action will remain constant. Examples include spam filters and Netflix recommendation engine (<https://bernardmarr.com/what-are-the-four-types-of-ai/>). Cognitive artificial intelligence is a type of artificial intelligence that imitates human intelligence by thinking and trying to learn (<https://www.cohesity.com/glossary/cognitive-ai/>). Autonomous artificial intelligence is a type of artificial intelligence that can interact with its environment spontaneously, without any intervention, make decisions and set goals and strategies based on new drums (Mathews et al., 2021:4). The increase and development of types of artificial intelligence reveals the fact that human intelligence can be imitated in every aspect. This reality shows that technology can replace humans in many areas, that many algorithms can think and work like humans, and that it can be used for good purposes as well as for bad purposes. The increase and development of types of artificial intelligence reveals the fact that human intelligence can be imitated in every aspect.

Artificial intelligence, which develops with the opportunities offered by developing technology, is present in many segments in the field of marketing as in many fields. Artificial intelligence technology is actively used in different business areas and sectoral activities. While artificial intelligence technologies, which can perform transactions through databases, provide great advantages to businesses, they are thought to have negative effects on customers in terms of data privacy and ethics. The dark side of artificial intelligence has emerged with the manipulation of customers by profit-making applications, especially for businesses operating in the field of marketing. In the 21st century technology era, where online shopping is

more preferred, it has been observed that customers are active on online shopping sites for a long time. During this period, customers who are exposed to advertisements of various products and services evaluate the activities of businesses' artificial intelligence applications, which they define as the art of influencing customers, as manipulation when evaluated from the customer's perspective. Different practices such as fake reviews in the evaluation tabs of the products, customers identified by businesses that make evaluations as if they have used the product, extra stars, etc. are not ethically appropriate and reveal the dark side of artificial intelligence. The basic ethical values of artificial intelligence include ensuring that customers use this technology and its extensions without prejudice. The main purpose of the studies on the protection of personal data is to protect customer rights. The fact that personal data can be processed and shared with third parties negatively affects the ethical dimension of artificial intelligence-oriented strategies. The values that businesses are expected to offer to customers at this point are openness and clarity, paying attention to ethical elements, processing data at a minimum level and customer approval in this process.

Based on the understanding of sustainable marketing, which is becoming increasingly important in the current century, the basic condition for using artificial intelligence as a long-term reliable marketing tool is to provide the necessary customer trust. The basis of marketing strategies is to convince customers to sell. The formation of purchase intention in customers, even if the purchase behavior does not occur, is an important factor for businesses that brings the potential customer one step closer to the business. With the increasing use and impact of artificial intelligence, traditional methods have taken a back seat. Although this is an advantageous situation, with the increase in data processing and the effect of manipulations created due to the increase in data processing, customers are quickly directed to sales with a faster and fuzzy decision-making. The rapid progression of the neurological influence process seems to neutralize the decision-making independence of customers. It is inevitable that customers who want to make informed decisions and do not want to be manipulated in line with the principle of ethics and transparency should have more knowledge in this field. While customers are expected to improve their digital literacy and protect themselves, businesses need to ensure the prerequisite of creating customer value by taking legal regulations into account. In addition to all these, the regulation of dark parties with legal practices and the establishment of ethical standards and the implementation of sanctions constitute the basis of sustainable marketing.

For businesses, overcoming the dark sides will create long-term customer relationships, increase brand value and build brand loyalty.

Considering that the positive energy emitted by satisfied customers is more effective in influencing other customers than many promotional activities, the importance of using artificial intelligence technologies with ethical standards is quite clear. In this sense, businesses can offer suggestions such as identifying and correcting the deficiencies in negative comments made by online shopping platforms instead of positive comments made through fake accounts, increasing the quality of the products and services offered instead of constantly bombarding customers with messages and advertisements throughout the day, engaging in activities that support customers' healthy decision-making processes instead of serving personal data in inappropriate ways, developing marketing strategies that create customer value within the scope of openness, transparency and ethical values, and creating systems integrated with artificial intelligence.

Kaynakça

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