

# MEDIA LITERACY IN E-COMMERCE AND THE RELATIONSHIP WITH ARTIFICIAL INTELLIGENCE

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## INTRODUCTION

Artificial intelligence is currently one of the most trending topics on a global level, both among the professionals from various fields and among everyone else who is familiar with the existence of this notion. However, the question that arises – why is this so? Is it because the world is afraid of the unknown? It goes without saying that the potential reluctance plays a huge role in this regard. In fact, the testimonies and the experience point to the conclusion that comfort is found in safety. The enhancement and dynamics of the development of needs and wishes result in new forms of their satisfaction, respectively, and one of those forms is precisely the artificial intelligence. However, what happens when the artificial intelligence is mentioned in the context of e-commerce, which, equally as artificial intelligence, is also causing confusion? There is a clash with the fact that the knowledge is the existential assumption in order to have a satisfactory level of readiness to confront. In this case, that knowledge is precisely the media literacy, in the broadest possible sense. In order to have quality communication, it is important to understand the process of communication,. However on the other hand, the understanding of the communication process encompasses several processes that differ from each other, but who also complement each other. This paper analyses the media literacy in the e-commerce in relation to artificial intelligence and aims to define, but also to bring the meaning of each of these terms closer to the readers, and to explain the meaning of their mutual cohesion for the modern society. Finally, the paper aims to provide information on why media literacy is important for the users or the consumers in the context of the e-commerce in the age of artificial intelligence.

**Keywords:** e-commerce, media literacy, machine learning

## E-COMMERCE

E-commerce or e-commerce is the buying and selling of goods and services, or transfer of funds or data, over an electronic network, primarily the Internet. The focus is on digitally enabled commercial transactions between different stakeholders. Digitally enabled transactions include all transactions mediated by the digital technology.

The exchange of value is crucial in comprehending the limits of the e-commerce. Without an exchange of value, no trade can occur.

Thirty years ago, there was no e-commerce as the world knows it today. However, in this relatively short period of time, it has been reinvented several times. The early years of e-commerce, the late 1990s, were a time of business vision, inspiration and experimentation. Nevertheless, it soon became apparent that establishing a successful business model based on those visions would not be easy. A period of downsizing and revaluation followed, leading to the stock market crash of 2000-2001, with the value of e-commerce, telecommunications and other technology stocks plummeting. After the bubble burst, many were quick to write off e-commerce. From today's perspective, the conclusion is that such behaviour was wrong. The companies that survived redefined and refined their business models, and technology became more powerful and cheaper, which eventually led to locating companies that actually produced profits. It is important to understand that the rapid growth and change that occurred in the first thirty years of the e-commerce was just the beginning – what could be called the “first thirty seconds of the e-commerce revolution”.

Technology continues to develop at exponential rates. This fundamental fermentation gives the entrepreneurs new opportunities to create new businesses and new business models in traditional industries, and the opportunity to advance old businesses and business models, too. Business changes are becoming disruptive, rapid, and even destructive, while offering new opportunities to the entrepreneurs and resources to invest.

The improvements in the core information technologies and the continued entrepreneurial innovation promise as much change in the next decade as in the last. The twenty-first century will be an era of digitally enabled social and commercial life, the contours of which can barely be discerned at this point.

## ARTIFICIAL INTELLIGENCE

Defining artificial intelligence is challenging, primarily because of its mass-scale application in recent times. The attempts to define it have evolved over time, but in order to get a full picture of what AI is, a broader perspective is needed. This is why it is essential to consult relevant sources, starting with the Oxford Dictionary. According to the Oxford Dictionary – artificial intelligence is originally characterized as a creation of computer networks that can perform activities that normally require human intelligence, such as vision, voice recognition, decision making and language understanding. In “What is Artificial Intelligence”, author John McCarthy includes the term “artificial intelligence” and simply explains it as autonomous thinking of the machines (McCarthy, 2007). According to McCarthy, artificial intelligence is the study and development of intelligent machines, with an emphasis on intelligent computer programs.

There are researchers who define artificial intelligence as intelligence of a computer or machine that enables imitation of the human abilities. Artificial intelligence uses various technologies to give human intelligence to the machines, allowing them to feel, understand, plan, act and learn. In their most basic forms, AI systems can perceive environments, recognize objects, get involved in decision-making, solve complex problems, recall past experiences, and imitate patterns (Kanade, 2022).

## MEDIA LITERACY

The rapid development of the information and communication technologies and the mass media system in the modern world creates fundamental changes in the general philosophy of understanding, posing new challenges and opening new research horizons in the field of media outlets and media education. One of the primary objectives is to create the ability to learn. Globally, the prevailing perspective on this matter involves introducing of the fundamental core of knowledge, upon which a further set of knowledge, skills, inclinations, competencies are built, i.e., the formation of a holistic perception of the world, is the currently dominating narrative.

British scientist A. Hart states that media education should be based on the study of the following six key concepts:

1. “media agencies” (functional system analysis),
2. “media categories” (analysis of the media text types),
3. “media technologies” (analysis of the technological process of creating a media text),
4. “media languages” (analysis of audiovisual means of expression),
5. “media audience” (audience typology analysis),
6. “media representations” (analysis of specific presentation by authors/sources of information/content in media texts) (Hart, 2002).

Elizabeth Thoman, who founded the Centre for Media Literacy in 1989, expanded on these ideas in an article written for the Association for Supervision and Curriculum Development (ASCD) (Thoman, 2002). Thoman stated that “At the heart of media literacy is the principle of inquiry”, where she developed five concepts (Jolls, Willson, 2014: 68 – 78):

1. All media messages are “constructed”.
2. Media messages are constructed using a creative language with its own rules.
3. Different people perceive the same media message differently.
4. The media outlets are primarily businesses driven by profit.
5. The media outlets have their inherent values and viewpoints.

It can be, therefore, said that media education is a process through which individuals become media literate and should acquire the ability to critically understand the essence and impact of media messages.

## MEDIA LITERACY AND E-COMMERCE

Media literacy is key in the e-commerce for several reasons:

1. Evaluation of information and discerning of disinformation and fake reviews: Users on the Internet are inundated with a plethora of information, including product descriptions, reviews, advertisements and promotional content, which suggests that disinformation and fake reviews are widespread in the digital realm, and especially in the online markets. Media literacy enables the individuals to critically evaluate information served, determining credibility, spotting red flags, and identifying irrelevant sources of information. The ability to discern accurate information versus biased or false content helps the consumers to make more informed decisions about their purchases, potentially leading to a certain level of satisfaction. On the other hand, by being able to discern authentic product reviews from inauthentic ones, shoppers can gain a more accurate and holistic understanding of the product, which should lead to more enjoyable online shopping experiences.
2. Identifying manipulative techniques: E-commerce platforms often use various persuasive techniques to influence consumer behaviour, such as scarcity tactics and flash sales. Media literacy should enable the consumers to recognize these manipulative tactics and understand in what manner they can influence their decision-making processes. By discerning the above, consumers can avoid impulse purchases based on emotion and instead make rational decisions.
3. Product comparison and analysis: Since there is a huge range of products available online, the choices are endless. It is media literacy that gives consumers the chance to efficiently and effectively compare and analyse various offers. By critically evaluating the product specifications and the prices, the buyers can make decisions based on individual and specific needs and preferences.
4. Discerning sponsored content and influencer marketing: In the age of social media and social media influencer marketing, it is definitely challenging to discern between genuine recommendations and sponsored content. Media literacy helps the consumers to identify what type of content is being marketed, allowing them to approach it with the appropriate behaviour based on the knowledge.
1. Understanding personalization and data privacy and awareness of consumer rights and protection: Many e-commerce platforms use artificial intelligence and data analytics to personalize product recommendations and advertisements. Media literacy helps consumers understand and discern the trade-offs between personalized experiences and data privacy. By researching and understanding the process of how consumer data is used to customize an online shopping experience, individuals can make informed choices about the information they share and protect their rights. In addition, media literacy also includes a very important aspect in society, which is the understanding of consumer protection rights in e-commerce, such as the refund policies, warranties and conditions for use.

In fact, media literacy plays a vital role in the e-commerce by ensuring that the consumers are adept at participating in, and navigating, the digital marketplace. Critical thinking and evaluation of information is the only way in which the consumers can make rational decisions when shopping online. Media literacy encourages the consumers to be discerning and smart shoppers, leading to more satisfying and successful outcomes.

## MEDIA LITERACY IN THE E-COMMERCE IN CORRELATION WITH THE ARTIFICIAL INTELLIGENCE

At its core, the media literacy represents the intellectual and the emotional capacity of the individuals to engage with the vast sea of information and digital content that surrounds them in the digital age. It embodies the quest for understanding, truth and wisdom in a globalized world where the flow of information is relentless and at the speed of light. Media literacy expects the individuals to be astute thinkers and reflective consumers, able to navigate the colourful landscape of e-commerce.

In the field of e-commerce, the integration of artificial intelligence introduces a new dimension to research in this field. Artificial intelligence systems, driven by algorithms and machine learning, are now playing a significant role in shaping the online shopping experience.

From a practical perspective, artificial intelligence can be seen as an embodiment of human creativity and rationality, i.e., an attempt to replicate aspects of human intelligence in machines. However, it also raises fundamental questions about the nature of knowledge, autonomy and experience.

The idea of machines imitating human intelligence has been around for thousands of years, even in the ancient Greek mythology. Nonetheless, the field of artificial intelligence research was officially established when Dartmouth College held a workshop on the subject in 1956. At the same time, computer scientists developed programs to compete with humans in checkers and chess. There was great optimism about the future of smart machines, and countries invested billions of dollars in artificial intelligence research. In spite of that, the necessary computing power and capability to turn such visions into reality did not exist back then.

In recent decades, though, and especially in recent years, scientists and engineers have made significant progress in this field. Over the course of this and the previous decade, thousands of companies have emerged to deliver AI-driven solutions. Conversely, there are companies that have successfully integrated AI as a fundamental component of new as well as existing products. Nowadays, artificial intelligence is so present in everyday life that hardly anyone notices it.

Therefore, in order to understand how the exchange of any values works and what specific experiences are due to, literacy in the broadest sense is useful.

It is emphasized that the literacy skills considered necessary for the 21<sup>st</sup> century are grouped into six groups: information literacy, media literacy, computer literacy, functional literacy, cultural literacy, distance education and e-learning literacy. The concept of media literacy, which is one of the literacy skills, in this context is generally defined by two approaches. According to the first approach, the media literacy is defined as receiving information from media outlets such as television, radio, newspapers and the Internet, and critically evaluating them (Bawden, 2001); according to the second approach, the concept is defined as the ability to understand and use environments in which information is produced, stored and transmitted and types of media such as text, graphics, newspaper, radio, television broadcast, CD and DVD (Yilmaz, 2020). It is undeniable that there is a close relationship between the media literacy and the other types of literacy. As noted above, media literacy, which has become necessary in recent years, is a concept that is confused with information literacy and, in some cases,

is used instead of information literacy. Notwithstanding, media literacy is only a part of the information literacy and is somewhat more limited in scope. Information literacy, in essence, naturally includes media literacy, as it consists of the skills to access, use and critically evaluate all types of information.

Information literacy is the ability to search, evaluate, use and create information in all areas of life to enable individuals to achieve their personal, social, professional and educational goals. This literacy is stated to be a necessary prerequisite for participatory citizenship, social acceptance, production of new knowledge, personal and corporate development and lifelong learning (Bundy, 2004). According to another approach, information literacy is a combination of library literacy, computer literacy, media literacy, technology literacy, ethics, critical thinking and communication skills (Curzon, 1995).

It is crucial at this point to pay attention to several axioms, as follows:

#### Axiom I

Individuals need to understand the external stimuli. Understanding external stimuli is a condition for an individual to be able to understand the others and to use standard symbols to communicate with them.

#### Axiom II

If knowledge is considered power, individuals will need different information to achieve meaningful positive change.

#### Axiom III

The objective of media literacy is to shift control from the media outlets to the individuals (Apak, 2008).

## PERSONALIZATION AND RECOMMENDATION SYSTEMS

Each consumer's demand for products and services varies according to their needs and wants, and e-commerce companies can provide users with a wide range of choices, and more importantly, they can recommend product information that meets their shopping habits, thereby reducing the time needed for the user to search for products and services that meet their requirements. Not only that – businesses can use the service to recommend personalized information to the user based on the information preferences of the user. The usefulness is multidimensional – the development of a personalized service in the process of online shopping can serve both for promotion of the specific goods and for a more satisfactory response to the specific request of the user. An important role is also played by the personalized marketing, which is a highly respected marketing method in corporate marketing, because compared to the traditional marketing methods, personalized marketing is more targeted – it is possible to do one-to-one marketing according to the individual needs and specific wishes of the users. A recommendation system is an essential and indispensable marketing tool for personalized marketing.

The providers of information, or more specifically the suppliers of goods, directly publish an unlimited amount of information on the Internet, and the user is expected to find the appropriate information they need and later to process it in an appropriate way. However, this “self-service” mode also means “wasting” the consumer’s resources, i.e., investing unnecessary time and effort for conversion between the web pages. Despite that, there is another way in which the information providers market the information, by sending the latest information to the user in the form of a summary, and they can review the information imposed on them and react in accordance with the current needs and wishes. The information posted in this manner is the result of the development of artificial intelligence. The advantage of the latter approach is that it can save time, so that the users do not have to spend too much energy in the search process. Recently, with the increasing number of online transactions and increasingly complex business information, it is challenging for the consumers to complete the exchange process satisfactorily. Still, if the website makes a reasonable recommendation for the user at the specific moment, it can help the user to smoothly complete the desired activity, thereby reducing the possible lack of satisfaction of all participants in the process.

The platforms can comprehensively analyse user purchase intentions and behaviour, provide customized services to the users, and increase website traffic through a process called service personalization. By analysing and designing the factors influencing consumer purchasing, the proposed model is tested and revised, and a personalized information recommendation service model is established. However, there are still significant problems in various fields in terms of the research of the recommendation system, which is due to the severity of the problem itself. Although researchers continue to achieve results in the studying of personalized recommendation systems, the designed recommendation algorithms have more or less limitations. So, this kind of personalized e-commerce recommendation system based on data mining can not only solve effectively the problem of huge and cluttered information in the recommendation system, but it can also realize the personalized presentation of goods, and it also has large value for research of applications.

There is not any doubt that personalization and recommendation systems powered by artificial intelligence are useful and can save resources for both consumers and service providers – businesses. Still, media literacy, in a broader sense, is important in order to avoid manipulations and abuses. It is very important for the users to be aware that the ultimate objective for businesses is to convert the users into customers and loyal customers. In order to achieve this objective, there are relevant tactics, including the above-mentioned personalization, and therefore awareness and vigilance ensures the protection of the person, integrity and budget, while avoiding impulsive purchases and reckless decisions regarding the choice and knowing the real reason why the user makes a decision in general for purchase.

## VIRTUAL ASSISTANTS AND CHAT-BOTS

It is quite obvious that businesses are incorporating artificial intelligence and machine learning into their operations increasingly. By using a virtual assistant or chatbot powered by artificial intelligence, businesses can not only increase revenue, but they can also save money and provide superior customer service. According to Gartner, chatbots will save \$8 billion in business costs by 2022. So it is no wonder that the virtual assistants and the chatbots are becoming more and more popular.



While virtual assistants are designed to handle a wide range of requests, chatbots typically provide specialized services, but both aim to improve and to develop the provision of individual assistance. The virtual assistant uses artificial intelligence to understand the user's request and respond to it in real time. This digital assistant can work alone or together with a live customer service representative. Concomitantly, a chatbot is a specific technology that allows consumers to establish and maintain communication - a conversation with a machine or computer. One of the specificities of chatbots is the fact that they can learn to answer questions, make suggestions and express reservation just like a human. All of these chatbots and virtual assistants use natural language processing to understand what the user wants or thinks when they ask a question or make a request, and then respond conversationally (Aws 2019).

Today's consumers demand, and are accustomed to, a personalized shopping experience. Customers are more likely to feel a connection to a company's brand if they are treated as individuals with specific needs. Getting a service tailored to their needs will make them feel heard and understood, which in turn will increase the likelihood that an exchange of value will occur. Accenture found that when consumers are comfortable and given the right advice, they are 75% more likely to make a purchase. On the other hand, Forbes research findings suggest that 80% of the consumers are more likely to buy from a company that tailors its offerings to the individual needs of its users. Furthermore, according to the Epsilon report, 80% of the consumers are more inclined to engage in communication with a company that offers them a personalized experience. (Clark, 2021). Virtual shopping assistants or e-commerce chatbots can guide the consumer through the purchase process and provide a high level of individualization of the purchase suggestions. In virtual sales, AI-powered virtual assistants and chatbots can replicate the in-store shopping experience, interact with the customers in original ways, increase loyalty, improve brand experience and sales process efficiency.

A perfect example is Netflix. Instead of letting users choose from thousands of content titles on offer, Netflix provides a much more targeted approach, narrowing down the selection of specific content based on subscribers' individual tastes. This feature not only improves the user experience, but also saves time. Finally, apart from the usefulness on the user side, there is also a reciprocal usefulness on the other side, so this company has managed to reduce annual unsubscribe costs by about a billion dollars thanks to this feature. (Simplilearn, 2022).

Moreover, using virtual assistants or chatbots in business means less manual work for the users, while ensuring uninterrupted service availability 24/7. In the world of online commerce, AI systems work around the clock. With the help of the machine, the business can give the impression to its customers that it is available on all channels at all times to meet the enquiry. This is especially useful if the business operates globally and its users are spread across multiple time zones. However, what if users have questions or requests that are beyond the scope of chatbots and AI assistants? Those same virtual assistants and chatbots help the users to get the human help they need as soon as possible.

For example, the response time WhatsApp is nine times faster and easier than a phone conversation. Most users prefer to send a text instead of a phone call. WhatsApp's direct messaging features are useful for the consumers and help the businesses to cut costs. Approximately 70% of all WhatsApp messages are opened. A large number of consumer service calls can be easily diverted to WhatsApp. The two most common support use cases - order tracking and refunds or cancellations - are handled easily and quickly via WhatsApp. (Ashta, 2020).

Virtual assistants and chatbots continue to convince humanity that they are welcomed in today's world which, among other things, is characterized by speed, recklessness and impulsiveness. On the one hand, the world is in a phase where everyone wants to be heard and understood, while on the other hand, the essence is often overlooked—and it is from this neglect that needs arise. That is why media literacy plays an essential role in preventing or possibly avoiding manipulation, so the need for acceptance should not prevail over the awareness of power over decision-making.

## AI-GENERATED CONTENT

AI-generated content is a new form of content creation and includes: AI painting, AI writing, AI music composition, AI video generation, AI voice synthesis, AI programming and much more. This technology creates a new form of digital content, offering huge potential for providers to create unique and personalized content for users.

The rise of artificial intelligence in the e-commerce is upheld by impressive statistics. The size of the AI-enabled e-commerce market is projected to reach \$16.8 billion by 2030. Furthermore, the customer service analytics is the most common implementation of AI in marketing and sales, with 57% of all respondents in developing countries declaring their adoption of AI. Notably, 78% of e-commerce brands have already implemented AI in their stores or plan to do so.

In this sense, the use of artificial intelligence in the marketing area is trending, where the artificial intelligence offers the possibility of analysing large data sets as well as so called user segmentation, in this fashion enabling targeted and personalized marketing. This approach not only improves the user engagement, but also increases conversion and sales rates.

In parallel, for HR employees, AI-powered recruiting tools streamline the process and increase the likelihood of making the right decisions.

These developments highlight the importance of leveraging technology and automation in today's e-commerce landscape. As businesses, regardless of size and industry, try to stay competitive in the digital age, technology and automation are no longer just desirable—they're essential. Actually, it is becoming apparent that companies that embrace modern solutions will lead the way in defining the future of e-commerce.

It is crucial for retailers to leverage predictive analytics, a type of artificial intelligence technology, to enhance their inventory management systems for better inventory control. This can significantly help with volume management, improving customer satisfaction.

In logistics, artificial intelligence technologies such as machine learning and robotic process automation can streamline operations, reduce delivery times and improve service.

The future of e-commerce is undoubtedly digital, but it is also more than that. The future is intelligent, dynamic, personalized and engaging. It is a future where technology not only supports business, but also drives them. The future of e-commerce is here, and it's brighter than you could ever imagine.

The content generated by the artificial intelligence is clearly and unequivocally present in the online space, and increasingly in e-commerce. Nevertheless, media literacy or, ultimately, reason is the key to distinguishing humanity from machines or computers. The unassisted discovery, systematization, analysis of information and drawing of conclusions helps the humanity not to be consumed by the artificial intelligence. Therefore, it is crucial that knowledge is constantly updated, expanded or replaced with new and current ones, in order to ensure and stabilize the position of the human abilities and knowledge.

## DIGITAL MANIPULATIONS AND FAKES

Digital manipulations and fakes that represent artificial but hyper-realistic video, audio and images created by algorithms are one of the latest technological advances in artificial intelligence. Fuelled and amplified by the speed and scope of dissemination via social media, they can quickly reach millions of people and result in an unimaginable and uncontrollable spectrum of fraud in the marketplace. Notwithstanding, the existing understandings of the implications of the fake products on the market are limited and fragmented. Against this background, there is a development of knowledge about the importance the fakes have for the businesses and the consumers, specifically the threats they pose, how to mitigate those threats and the opportunities they open up. The findings show that the main risks for the companies include damage of the image, reputation and reliability and as well as the obsolescence of the existing technologies. On the other hand, the consumers may suffer blackmail, harassment, defamation, harassment, identity theft, intimidation and retaliatory practices.

Advances in artificial intelligence - especially machine learning and deep neural networks - have contributed to the development of fakes (Chesney and Citron, 2019, Dwivedi et al., 2021, Kietzmann et al., 2020, Mirsky and Lee, 2021). They look very believable to the extent that distinguishing them from the authentic media can be a difficult challenge for humans. Thus, they can be used for the purposes of widespread market fraud, with various consequences for both businesses and consumers (Europol, 2022; Luca and Georgios, 2016). Indeed, a recent study by the scientists at University College London ranks fake audio or video content as the most worrisome use of AI in terms of its potential applications for crime or terrorism (Caldwell et al., 2020). Concurrently, this nascent technology has the potential to create great business opportunities for content creation and engagement (Etienne, 2021, Farish, 2020, Kietzmann, 2020).

Marketing fraud is ubiquitous, making it a fundamental issue in research and marketing (Boush et al., 2015, Darke and Ritchie, 2007, Ho et al., 2016). In general, fraud refers to a deliberate attempt or act to present false or incomplete information in order to create a belief of truth (Darke and Ritchie, 2007, Ludwig et al., 2016, Xiao and Benbasat, 2011). Hence, it is the deliberate manipulation of information to create a false belief, all of which can be further developed through the creation of counterfeits, simultaneously harming both the consumers and the businesses (Xiao & Benbasat, 2011). Fraud permeates the marketplace and damages overall well-being and financial resources, undermining the confidence in businesses and the marketplace as a whole.

Another critical factor that makes the fakes relevant is their spread via the Internet and social media, at a time when both have become an integral part of people's personal and professional lives, allowing the consumers access to the easy-to-use platforms for discussions in real time, ideological expression, dissemination of information, and sharing of emotions and feelings (Perse & Lambe, 2016). Consequently, the volume and speed of distribution of fakes, combined with the increasing penetration of digital technologies in all areas of society, will have profound positive and negative implications on the market (Kietzmann et al., 2020, Westerlund, 2019).

Digital manipulations and certificates currently stand as a stark warning about the impact of the artificial intelligence on the quality of the humanity's existence. It is obvious that these types of technology can and should be used in another direction - however, what dominates is their utilization with unethical implications. Media literacy should certainly have a milestone task here, which means that the educated people do not allow themselves to be victims or they do not allow the humanity to be the victim. Apart from prevention, which basically involves being careful when sharing data, taking action to help victims is also key. Thus, awareness should be spread about such malicious use of artificial intelligence, but also not to spread such use of the artificial intelligence. However, responsible and conscientious behaviour does not always mean acting only, but also not acting sometimes, and media literacy should ensure awareness of this.

## ETHICAL CONSIDERATIONS

It's clear that the need to use AI in e-commerce is on the rise, with more and more businesses turning to this powerful technology to improve user engagement and drive and grow sales. Despite that, as with any new technology, there are important ethical considerations to be aware of when it comes to using AI in e-commerce. One of the key ethical concerns surrounding the use of artificial intelligence in e-commerce is the issue of bias. AI algorithms are only successful against the data they are trained on, so if the data is biased in any way, so will the algorithms being created. This may lead to unfair or discriminatory treatment of certain users, which is not only unethical but can also damage the reputation and the main value of the business. So as to avoid bias in AI-powered e-commerce, businesses should take steps to ensure that the data they use to train their algorithms is as diverse and representative as possible. This means collecting data from a wide range of sources and regularly checking and cleaning the data to remove any potential biases.

Another ethical concern for artificial intelligence in e-commerce is the issue of transparency. The users have the right to know how and why they are being targeted with certain information, and businesses have a responsibility to be clear and transparent about their use of AI. This means providing specific and concise explanations of how AI is used and giving to the consumers the opportunity to opt-out of AI, particularly in marketing, if they so choose. With a view to ensure the responsible and problem-free use of AI in e-commerce, the businesses need to prioritize ethics in their approach. This means regularly consulting and updating AI use policies and practices to ensure they are fair, transparent and in accordance with industry standards and regulations. It also means being willing and creating the space to listen to user feedback and continuously make the necessary changes to ensure that the use of AI is responsible and ethical.

When discussing ethical considerations, the role of media literacy can be most prominently identified. It is valuable for the users to know that, as the consumers, they have the opportunity to reach out if they suspect that they are potentially threatened by AI. What's even more important is the knowledge that they not only can, but should reach out. So, although it cannot be denied that artificial intelligence is a global present and future, nor can the development that contributes to the spread of AI use in all areas be prevented, it is still possible for users to protect themselves to a certain level. Thereupon, if the user suspects there is a risk of manipulation, there is room to act and ensure that decision-making is less the result of external assistance, and more on personal calculations and setting priorities. Because of all this, it should be understood that humanity must not lose the need to react to pleasure, but also to displeasure, and to be literate enough in order to be aware of the manner to achieve the objectives.

## CONCLUSION

The media literacy in the age of e-commerce is no longer just what is stated in the definitions. Media literacy is challenging to define when e-commerce is augmented by artificial intelligence. Making critical conclusions based on the messages published by the media outlets is a relevant basis for understanding what media literacy is and why it is important, but it is precisely the changing of the meaning of all the mentioned terms that is problematic. Critical inference as an expression does not simply mean the process of thoughtfully making logical judgments based on available data, evidence, and information. It requires general identification, analysis, evaluation, counter-argumentation and synthesis of knowledge, but also a willingness to replace existing knowledge with completely new ones. The messages placed by the media outlets are not the only thing that is known so far, but it is much more than that.

People are constantly targeted by messages, i.e., information, ideas and perspectives, which have different goals, often reflecting the values of the content creators. They can be in the form of notifications; editorials; columns; entertainment, educational, social, cultural, but also propaganda content. That is why it is crucial to understand that almost everything that surrounds individuals is the result of careful and causal placement. Finally, the development of the media involves a transition from traditional to modern or trendy media. This dynamic calls for caution in enumerating what are media outlets, as it is not accurate to say that today's trends are digital media. It is not accurate, because new technologies, user-generated content, interactive and gamified media outlets and ephemeral and disappearing content that increasingly function as classic media must also be taken into account.

The dynamics of today requires an open mind, readiness for efficient and effective knowledge acquisition and appropriate skills for applying the acquired knowledge. All of this is important to ensure successful coping with the challenges of communicating with other entities, as well as a certain level of quality of being. However, it is not only important whether individuals are sufficiently literate, i.e., media literate, but whether society is literate, i.e., media literate. Selflessness is therefore crucial in making joint efforts to eradicate old habits of lack of interest and to build new, stronger foundations of shared knowledge that will benefit everyone individually and at the same time all together.

## REFERENCES

1. Apak, Ö. (2008). Türkiye, Finlandiya ve İrlanda ilköğretim programlarının media okuryazarlığı eğitimi için incelenmesi, Yayımlanmamış Yüksek Lisans Tezi, Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı, Kocaeli
2. Ashta, K. (2022). How Ai Chatbots and voice assistants are driving the e-commerce growth, Haptik
3. AWS Amazon. (2018). Amazon Personalize
4. Bawden, D. (2001). Information and digital literacies: A review of concepts, *Journal of Documentation*, 57(2), 218-259
5. Boush DM et al. (2015). Deception in the marketplace: The psychology of deceptive persuasion and consumer self-protection
6. Bundy, A. (2004). Australian and New Zealand information literacy framework: Principles, standards and practice (2nd ed.), Australian and New Zealand Institute for Information Literacy
7. Campbell, C., Plangger, K., Sands, S., & Kietzmann, J. (2022). Preparing for an era of deepfakes and AI-generated ads: A framework for understanding responses to manipulated advertising, *Journal of Advertising*, 51(1), 22-38.
8. Chen, C., & Lyu, L., (2023). A pathway towards responsible AI generated content
9. Chesney B. et al. (2019) Deep fakes: A looming challenge for privacy, democracy, and national security, *California Law Review*
10. Clark, S. (2021). 6 ways AI-based personalization is improving the customer experience, CMSWire.com
11. Curzon, SC (1995). Information competencies final report: A report submitted to the Commission on Learning Resources and Instructional Technology Work Group on Information Competence CLRIT Task 6.1. 29
12. Dang, H., & Malik, A., (2017). Personalization in marketing: an exploratory study, *International Journal of Internet Marketing and Advertising*, 11(2), 124-136.
13. Darke, PR, & Ritchie, RJB (2007). The Defensive Consumer: Advertising Deception, Defensive Processing, and Distrust, *Journal of Marketing Research*, 44(1), 114-127
14. Dwivedi, YK et al. (2020). Setting the future of digital and social media marketing research: Perspectives and research propositions, *International Journal of Information Management*, 59
15. Etienne, H. (2021). The future of online trust (and why Deepfake is advancing it), *AI and Ethics*

16. Europol. (2022). Facing reality? Law enforcement and the challenge of deepfakes, an observatory report
17. Farish K. (2020). Do deepfakes pose a golden opportunity? Considering whether English law should adopt California's publicity right in the age of the deepfake, *Journal of Intellectual Property Law & Practice*
18. Geru, M., Micu, AE, & Capatina, A.. (2018). Using artificial intelligence on social media's user generated content for disruptive marketing strategies in eCommerce, *Economics and Applied Informatics*, 24(3), 5-11
19. Giovannella C. (2010). Beyond the Media Literacy: Complex Scenarios and New Literacies for the Future Education, *The Centrality of Design*
20. Gupta, A., Hathwar, D., & Vijayakumar, A. (2020). Introduction to AI chatbots, *International Journal of Engineering Research and Technology*, 9(7), 255-258.
21. Hart A. (2002). Media education in 12 European countries a comparative study of teaching media in mother tongue education in secondary schools, *E-Collection of the Swiss Federal Institute of Technology Zurich*
22. Ho SM et al. (2016). Computer-mediated deception: Strategies revealed by language-action cues in spontaneous communication, *Journal of Management Information Systems*
23. Jolls T., & Wilson C. (2014). *Journal of Media Literacy Education*, 6, 2, 68-78
24. Kalakota, R., & Robinson, M. (2001), *E-business 2.0: Roadmap for Success*, Addison-Wesley
25. Kanade, V. (2022). What is Artificial Intelligence (AI)? definition, types, goals, challenges, and trends in 2022, *Spiceworks*
26. Kietzmann, J., Lee, L., McCarthy, I., & Kietzmann, T. (2019). Deepfakes: Trick or treat?, *Business Horizons*, 63
27. Lewis, J., & Jhally, S., (1998). The struggle over media literacy, *Journal of communication*, 48(1), 109-120
28. Luca, M., & Georgios Z. (2016). Fake It Till You Make It: Reputation, Competition, and Yelp Review Fraud, *Management Science*, 62, no. 12
29. Ludwig, S., Van Laer, T., De Ruyter, K., & Friedman, M. (2016). Untangling a web of lies: Exploring automated detection of deception in computer-mediated communication, *Journal of Management Information Systems*, 33(2), 511-541

30. Caldwell, M. et al.(2020)AI-enabled future crime, Crime Science
31. McCarthy, J. (2004). What is Artificial Intelligence?
32. Mianzhu P. (2017). Research progress and application overview of artificial intelligence, Science and technology square
33. Minsky M. (1961). Steps toward Artificial Intelligence, Proceedings of the IRE, 49, 1, 8-30
34. Mirsky, Y., & Lee, W. (2021). The Creation and Detection of Deepfakes: A Survey, ACM Computing Surveys, 54 1-41
35. Perse, EM, & Lambe, J. (2016). Media Effects and Society (2nd ed.), Routledge
36. Rakhra, M., Gopinadh, G., Addepalli, NS, Singh, G., Aliraja, S., Reddy, VSG & Reddy, MN (2021). E-commerce assistance with a smart chatbot using artificial intelligence, 2021 2nd International Conference on Intelligent Engineering and Management (ICIEM) 144-148)
37. Rayport, JF, & Jaworski, BJ (2004), Introduction to e-commerce, McGraw-Hill Irwin MarketplaceU
38. Rossi, F. (2016). Artificial intelligence: Potential benefits and ethical considerations
39. Simplilearn. (2022). Netflix recommendations: How Netflix uses AI, Data Science, and ML, Simplilearn
40. Thoman E., Jolls T., & Share J. (2002). Literacy for The 21st Century: An Overview and Orientation Guide For Media Literacy Education, Center for Media Literacy
41. Westerlund, M. (2019) The Emergence of Deepfake Technology: A Review, Technology Innovation Management Review, 9, 40-53
42. Xiao, B., & Benbasat, I. (2011). Product-Related Deception in E-Commerce: A Theoretical Perspective, MIS Quarterly, 35(1), 169–195



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