ZORAN TOMIĆ*

TOMISLAV DAMNJANOVIĆ**

IVAN TOMIĆ***

ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS

ABSTRACT

Modern political campaigns are in constant flux and are influenced by numerous factors. Voters are constantly on the move, making segmentation significantly challenging. Simultaneously, literacy and education levels among the electorate are increasing every day, leading to a more critical attitude towards the persuasion process. In addition, changes in technology and the development of information and communication systems directly and drastically impact the shaping and management of modern campaigns. Artificial intelligence, machine learning, and deep learning have been influencing the creation of modern political campaigns for a decade. The significance of artificial intelligence enhances the power of big data, algorithms, and, consequently, social networks. The authors explore the impact of artificial intelligence on the planning and execution of political campaigns and the resulting consequences for political candidates, parties, and society.

Keywords: artificial intelligence (AI), political campaigns, big data, algorithms, voters, ethics.

*University of Mostar, Mostar, Bosnia and Herzegovina, zoran.tomic@sum.ba
**Mandat, Belgrade, Serbia, rastco94@gmail.com
***Manchester Metropolitan University, Manchester, England, UK, ivan.tomic@stu.mmu.ac.uk

INTRODUCTION

Throughout the history of political campaigns, politicians have conducted campaigns to make their policies and views appealing to the largest number of voters, and reaching the target audience has been a complex process. Therefore, the initial systematic collection of voter data was likely one of the most significant individual events in the history of political campaigns. Voter data allowed politicians to scrutinize society and provided them with an opportunity to analyze the public mind (Hersh, 2015).

Political campaign strategists have long known that voter data has been, and still is, the cornerstone of every political campaign plan. This realization has influenced the development of campaigns in which voter data is a prerequisite for electoral success. Newer technologies that increase the amount of available data or changes in the way these data are created or collected are not categorical changes in the political landscape but changes in degrees and levels. Access to raw voter data is therefore considered to have fundamentally changed the relationship between politicians and voters. Data has enabled politicians to judge the mass public, just as the mass public judges politicians (Williams)

As emphasized, data in its rawest form has been the cornerstone of political campaigns for the past hundred years, and today's technology plays a crucial role in generating this data. Technology has facilitated the growth and dynamism of (political) communication with the public. In other words, technology has increased the quantity of political communication, and this heightened communication has impacted the quantity and quality of voter data processing (Williams,)

It is evident that technology has influenced and continues to influence all segments of human activity and life, thereby altering the nature of political campaigns. Today, combination of big data (Laney, 2001), artificial intelligence and machine learning provides crucial insights into the political process and can uncover essential facts that can be extremely beneficial for a political

(electoral) campaign. Technology assists political parties in "reading the minds" of voters and tracking their behavioural patterns (Kumar, Panda, 2022) Therefore, political parties and politicians rely more on new technologies. Big data, artificial intelligence and machine learning are now used for psychographic segmentation and analysis of voter behaviour, but also for numerous other processes in strategy creation and implementation (Kumar, Panda, 2022).

Based on new approaches and artificial intelligence, it is evident that we are in a time when a point has been reached where politicians can uncover deeply personal information about voters and then use that information to target voters with specific "information packages" (Williams). This targeting of information is commonly referred to as political microtargeting. The nature of this political microtargeting is evidence of a fundamental change in the political landscape, as politicians can target individual voters and proactively shape public opinions and beliefs.[1]
The subject of research is the possible use of artificial intelligence in modern political campaigns. The research goal is to determine how artificial intelligence changes strategic approaches and strategic planning of political campaigns and whether artificial intelligence is a condition for winning elections. The purpose of the research is to give a recommendation for the use of artificial intelligence in political campaigns and to present the possible dangers and shortcomings of artificial intelligence in shaping modern and democratic campaigns.

Initial hypotheses:
H1: Artificial intelligence will significantly transform the way political campaigns are conducted.
H2: The processing of vast amounts of data

---

1 This practice of shaping voters' opinions is not, however, by all new practice. Public opinion polling may be the first an example in the field of political communication that tried to master the public consciousness, instead of revealing it. Public opinion polling was originally a tool of the "mass psychology" parties of the European right, and soon it was discovered that polling public opinion requires money and power. In a 1949 book by political scientist Lindsay Rogers, the term "pollster" (Rogers, 1949) was coined to evoke sentiment about the word "trader".

through artificial intelligence significantly influences the segmentation of the electorate and their persuasion process.

H3: The increasing significance of artificial intelligence is also amplifying the role of social media in shaping, implementing, and influencing election outcomes.

H4: There are numerous artificial intelligence tools that can enhance the strategic implementation plans of political campaigns.

H5. Artificial intelligence tools can have a manipulative and deceptive impact on the genuine portrayal of candidates and political messages.

H6. Widely accepted ethical principles aimed at serving the public interest should be applied to the use of artificial intelligence in political campaigns.

The scientific methods employed in the preparation of this paper include literature analysis, comparative analysis of previous research, and theoretical insights on artificial intelligence, culminating in the synthesis for drawing conclusions.

The structure of the paper comprises an introduction, the definition of artificial intelligence, an analysis of the impact of big data, social media, and algorithms, as well as the role of artificial intelligence in political campaigns. The paper explores the application of artificial intelligence in political campaigns, potential consequences of its use, and the future of artificial intelligence in political campaigns.

WHAT IS ARTIFICIAL INTELLIGENCE?

Artificial intelligence (AI) (Tomić i sur., 2022) technology is, a branch of computer science that studies and develops intelligent machines and software. This field is defined as the study and design of intelligent agents, where an intelligent agent is a system that perceives or recognizes its environment and takes actions to increase its chances of success (Tomić i sur., 2022).

Indications of artificial intelligence as a technology (Davenport, 2021) have existed since the emergence of more complex electromechanical machines for automatic data processing in the thirties of the twentieth century. The author of the term, J. McCarthy, described artificial intelligence as a scientific discipline that deals with designing "computer systems whose behavior can be interpreted as intelligent" (Tomić i sur., 2022). In order to understand artificial intelligence, it is necessary to point out the most important forms or branches such as machine learning and deep learning.

Machine learning is a method of automatically fitting data into models and "learning" by instructing the model with data (Davenport, 2021). Thus, a machine learning algorithm is a search procedure, intended to select the best function from a set of potential functions to explain the relationship between features in a data set (Kelleher, 2021). Machine learning has two fundamental branches: supervised learning and unsupervised learning. The basic difference between supervised and unsupervised learning is primarily in the data, because supervised learning requires that the sample has input and output data, while in unsupervised learning the requirement is only on the input data, while the output data is completely unknown (Kelleher, 2021).

On the other hand, "deep learning is an area of artificial intelligence focused on creating large models of neural networks, capable of making valid decisions based on available data." (Kellher, 2021). *Deep learning* is a subset of machine learning algorithms that refers to different types of deep neural networks that have proven to be superior to traditional machine learning algorithms. The advantage of deep neural networks is that they can create extremely complex mathematical models. Their limitation is that they require large data sets and their "training" can take days or even weeks (Volarić i sur., 2014).

Therefore, machine and deep learning are branches of artificial intelligence that, with the help of marked or unmarked data, independently build algorithms for solving certain problems. They are used for non-standard programming problems that are difficult to formalize with rules.

20

S O U T H   E A S T E R N   E U R O P E A N   J O U R N A L   O F   C O M M U N I C A T I O N
U N I V E R S I T Y   O F   M O S T A R   /   V O L U M E   5 ,   N O   2 ,   W I N T E R   2 0 2 3

A R T I F I C I A L   I N T E L L I G E N C E   I N   P O L I T I C A L   C A M P A I G N S

BIG DATA – DATA ANALYSIS

With the development of information technologies, data, as emphasized, has become a crucial resource for managing political campaigns. Political parties in numerous countries analyze big data to understand voter profiles. Taking a broader perspective on data processing, strategic information will provide the foundation for shaping the strategy of political and electoral campaigns, candidate selection, and constructing the party narrative (Saffulah, Parveen, 2022). Data, in the traditional sense, can be understood as facts or statistics about a person, group, thing, or phenomenon. However, in a more modern, political, and technological context, data can also be viewed as psychological profiles of individual voters. Psychological profiles may include an analysis of personality traits as well as opinions, beliefs, and/or behaviors that can be inferred from information collected about any individual (Williams).

Psychographic data collected from social media platforms are somewhat more complex than statistical data, as they examine people under a fine psychological microscope. The content of psychographic data is primarily derived from the analysis of five personality traits – openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Williams). This analysis is conducted to understand an individual's readiness to change their stance on any given topic and how to achieve such a change. However, undoubtedly, it is extremely difficult, if not impossible, to perfectly profile members of an entire society and then categorize that society into tables. Due to their complexity, psychographic data is not used to define voters but rather to create ways in which politicians can perceive their voters (Williams). These perceptions are used to craft campaign strategies that are specifically tailored to different segments of voters.

SOCIAL MEDIA AND ALGORITHMS

Public opinion polling has been and remains one of the most important instruments of political communication and political campaigns since the beginning of modern campaigns. Today, Facebook, X (Twitter), and Instagram have significantly transformed it with their ability to influence public beliefs and activities. In fact, social media platforms are much more effective in influencing the public than any form of traditional polling (Williams).

Large social media platforms have created a virtual reality where communication can take place over great distances and among a large number of people almost instantly. This communication has created a social reality where discussions on opinions, beliefs, facts, and political and moral attitudes unfold like wildfire among people, crossing national borders and even language barriers. Essentially, access to communication with the public is readily available and at our fingertips. The resulting influx of information from these social media platforms is sorted through algorithms (Williams).

Algorithms have enabled faster and more precise communication with voters through social media, targeting specific audiences. Algorithms, in simplified terms, are an integral part of the broader and more general category of artificial intelligence. They are considered a set of rules or procedures to be applied in a precisely determined sequence to solve a specific problem (Tomić, 2023).

After algorithms perform their tasks, social media platforms collect all the data they gather about individual users and store it on their servers. This information is used to create "profiles" of individuals. These psychographic profiles are often sold to politicians or organizations working on behalf of politicians. To emphasize the value of this business, *data has surpassed oil as the most valuable commodity in the world* (Econimist, 2017).

ROLE OF ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS

The paradigm of election campaigns has changed worldwide. The world is becoming a digital space, and artificial intelligence and machine learning are dominating traditional methods of political campaigns. Given such technological advancements globally, political parties have started sharing their television and radio speeches through social media platforms like *Twitter*, *Facebook*, *Instagram*, etc. Utilizing social media platforms has helped them reach a broader audience and expand their message, particularly during the electoral period (Tomić, 2023).

As emphasized, artificial intelligence increasingly prevails in various aspects of our lives, including politics. Political campaigns rely more on technology as voters have a heightened perspective to choose someone who can meet their demands. To assist in fulfilling voter demands, political parties and candidates are seeking ways to leverage available technologies and ensure their victory (Sheldon, 2015).

Artificial intelligence finds its place and complements the needs of political parties and voters. It enables highly precise audience targeting, which is crucial in political campaigns. Candidates do not want to waste money on voters who already support or oppose their campaign. Instead, they aim to target a small number of undecided or swing voters who can decide the election outcomes.[2]

Big data reveals voter preferences

It is a well-known fact that everything we search on the Internet is stored online, so we leave a trace. Such searches or data storage are collected from devices such as laptops, smartphones, tablets, desktop computers, etc., and are called

big data. Big data has a special pattern if analytical tools analyse it. These data patterns are significant and help in understanding the behaviour and trends of individuals or groups (Saffulah, Parveen, 2022).

Big data is increasingly sought after in political campaigns to understand the elections and voters. Data is also used to predict election results and design campaigns with microtargeting (Nickerson, Rogers, 2014). Today, political parties understand and harness the potential of big data for political campaigns (Saffulah, Parveen, 2022). In the 2012 campaign for the U.S. presidential election, Barack Obama's campaign explored the potential of big data and utilized it significantly (Saffulah, Parveen, 2022). It is considered that precisely these data led the campaign and contributed to Barack Obama's victory in the 2008 U.S. presidential elections.

Over the years, political parties have developed their software applications to connect with voters and collect big data to understand voter perspectives, behavioural, and psychographic profiles. Citizens participating in elections as organizers, volunteers, or supporters have been the foundation for gathering as much data as possible. In practice, political parties have been and still are asking their volunteers and sympathizers to download their software applications. The moment an individual downloads the application, they allow access to their personal data from the phone. Thus, the smartphone has successfully replaced or complemented the value of door-to-door campaigns (Saffulah, Parveen, 2022). For example, Obama's canvassing applications provided volunteers with a list of neighbours to target. During the 2008 U.S. presidential elections, a million people gave the campaign access to their data on Facebook, including the data of their friends on Facebook. Obama's email list included 20 million Americans (Saffulah, Parveen, 2022).

---

2   According to the Emerson college survey from April 2023 six percent of voters are undecided, 43 percent supports Biden, 41 percent prefer Trump, and 10 percent prefers another candidate.

Transformation of upcoming political campaigns

Undoubtedly, artificial intelligence has already exerted a dominant influence on our technical culture. Numerous processes will depend on the capabilities of artificial intelligence and the ability to scale these capabilities in business and life. This holds for political communication and political and electoral processes as well. Isn't the news about the Republican National Committee (RNC) using AI-generated video in response to the announcement of U.S. President Joe Biden's re-election candidacy a significant and powerful example? (Powell, Dent). After this announcement, the RNC, through a video, criticized Joe Biden, illustrating how certain it is that artificial intelligence will transform our upcoming elections. The progress of digital technology provides new and faster tools for political messages and could have a profound impact on how voters, politicians, and journalists perceive candidates and campaigns (www.brookings.edu/blog).

APPLICATION OF ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS

Political strategists, along with scientists and practitioners in the field of artificial intelligence, are exploring models for applying AI tools in political campaigns. As this chapter is being written, not all possibilities and advantages of artificial intelligence in political campaigns have been fully realized. However, based on the results already achieved, it is possible to highlight some possibilities and changes (www.analyticsvidhya.com).

Campaign strategy
Artificial intelligence will certainly influence the formulation of campaign strategy. Strategic decisions and directions will depend on numerous possibilities and solutions. Although the strategy will remain the most important document of the campaign, with artificial intelligence, it will be somewhat more fluid, at least when it comes to the tactics and techniques of implementing strategic decisions.
Public opinion research

Artificial intelligence will provide better insight into voters' attitudes. Public opinion research will take on a new character by "scanning" the attitudes of voters through the analysis of social networks and processing big data. Such data will form the basis for numerous strategic guidelines in the campaign.

Campaign management
Artificial intelligence can manage and optimize various activities and actions in a campaign, such as budgeting, resource allocation, and scheduling. It can increase campaign efficiency and reduce errors.

Generating instant responses
Politicians can use generative artificial intelligence to respond instantly to the developments in the campaign. In the case of the Republican National Committee (RNC), they released their new video immediately after Biden's reelection announcement. It did not seem like the production went through extensive shooting, editing, or review. Instead, the tool was simply instructed to assemble a video with details of a dystopian (negative) future for the U.S. if Biden were reelected. In the coming year, response times could fall to minutes rather than hours or days. AI can scan the internet, think strategically, and devise a compelling challenge. It could be a speech, a press release, an image, a joke, or a video highlighting the strengths of one candidate over another. AI provides a cost-effective way to generate instant responses without relying on high-priced consultants or expert videographers.

Prediction model
Artificial intelligence is used today to develop prediction models. These models predict or determine the probability that a voter will support a particular candidate. Taking into account various factors, including voter demographics, voting patterns, and preferences on specific questions, these models can identify voters who are most likely to support a specific candidate.

Enhanced data analysis and targeting
Artificial intelligence algorithms can analyze large amounts of data about voters' demographics, preferences, and behavior. It enables more precise targeting of campaign messages and initiatives to reach specific audiences. It can improve the effectiveness of campaigns and increase the likelihood of winning support for a particular candidate.

Enhanced communication with voters
By utilizing social media, messaging apps, and other platforms, chatbots and virtual assistants powered by artificial intelligence can interact with voters, providing them with personalized information and responding to their queries in real-time.

Increased efficiency
By automating repetitive operations such as data entry, analysis, and reporting, artificial intelligence can help save time and resources in political campaigns. Staff could then focus on more strategic tasks that require their expertise and discretion.

Personalized messages
Based on voters' demographic data, voting history, and issue preferences, artificial intelligence can tailor messages for a precisely defined voter/group of voters. It allows campaigns to develop focused and stronger messages, potentially increasing the likelihood of persuading people to support a particular candidate (Khare, 2023).

Creating ads
Artificial intelligence tools have been used for some time now in the creation of advertisements. It enables the development of personalized advertising, combining both positive and negative messages. Now, it is significantly easier and faster to create an ad and broadcast it, either in response to an event or information or proactively managing information.

Discussions and topics
Artificial intelligence can be used to monitor influential individuals/influencers, trends, and sentiments on social media to better understand the reach of social media and voter preferences. Social media listening technologies powered by artificial intelligence can detect relevant discussions and topics, enabling real-time interaction with voters in campaigns.

Chatbots and virtual assistants
Voters can be contacted through social media, messaging apps, and other channels using chatbots and virtual assistants powered by artificial intelligence. With the help of these tools, voters can receive personalized and relevant responses to their queries, information, and engagement (Khare, 2023).

Efficiency measurement
Artificial intelligence can monitor and measure the performance of various activities carried out in the campaign such as advertising, "agitation" and the success of the event. It allows campaigns to identify what works and what does not, and make decisions based on that data to optimize activities (Khare, 2023).

Speech and sentiment analysis
Artificial intelligence can be employed for speech and sentiment analysis. By utilizing advanced algorithms, AI can analyse speeches and determine the sentiment expressed within them. This capability allows for a deeper understanding of the emotional tone and context of political communication, enabling campaigns to tailor their messaging based on public sentiment (Khare, 2023).

Researching the opposition
Artificial intelligence can assist political campaigns in conducting research on their opponents, including analysing their voting records and past statements (Politicalmarketer). It allows political parties to gain an advantage over their opposition (Politicalmarketer).

Attack on opponents
There are concerns that the power of artificial intelligence will likely be most effectively used against vulnerable populations, such as women, people of colour, and members of the LGBTQI+ community running in campaigns. In a study on

the 2020 Congressional election cycle, the report from the Centre for Democracy and Technology showed that women of colour are twice as likely to be targets of false and misinformation campaigns on the internet. In India, deepfake technology has been used as a weapon against female politicians and journalists, with many reporting that their images were placed on pornographic photos and videos circulating on the internet. Images generated by artificial intelligence and deepfakes in political advertisements could easily be used to sexualize female politicians, significantly undermining the credibility of women in campaigns (C. Powell, A. Dent).

Speech writing
Artificial intelligence can assist in speechwriting by analyzing past speeches and identifying key phrases, words, and themes. It can also aid in translating into the local language. It would help reach a broader audience and connect with voters from different cultural and linguistic backgrounds (various dialects).

Public relations
Using artificial intelligence in public relations is challenging to assess, but nonetheless, there is an understanding of how PR practitioners employ artificial intelligence to perform various communication tasks. Here are the most significant ones: 1) Natural language generation systems can produce press releases, convert written texts into speech, turn audio documents into text, and translate work and promotional materials into multiple languages; 2) Artificial intelligence is used for communication management tasks, including monitoring and sentiment analysis in media clips and social media posts, searching for brand mentions in larger volumes of text, images, and videos, as well as tracking competitors; 3) There are tools for proactively identifying journalists who write about specific thematic areas, enabling precise targeting of media likely to cover prepared and desired media releases, instead of manually compiling and maintaining lists of traditional media by category and keyword searching; 4) Commercially available AI-based products are widely used for social media analytics; 5) Authenticity tracking

of photos and videos is available; 6) AI can be used to tailor story angles for content creators, such as PR professionals or journalists, based on their past reporting and even their personalities; 7) AI can provide predictive data to help determine the right time to release a story; 8) AI can be used to enhance persuasiveness in communication and to present messages to individuals who are psychologically most sensitive to them; 9) AI can be used to shape public opinion (Tomić i sur., 2022).

Monitoring the costs of a political campaign
Artificial intelligence can be used to monitor the amount of money spent during a political campaign. It provides insights into deviations and irregularities in politicians' spending patterns. Additionally, AI-driven auditing tools can automatically scan and analyze financial documents and reports, reducing the need for manual intervention and increasing the efficiency of the audit process (Khare, 2023).

Optimization of fundraising/donors
Data analytics can identify potential donors, personalize fundraising appeals and optimize fundraising strategies to maximize campaign funding (www.bwf.com/ai-fundraising).
Regardless of the mentioned and numerous other possibilities, political culture imposes the need to verify all claims and data used to avoid inaccuracies and manipulation of the public.

POSSIBLE CONSEQUENCES OF THE USE OF ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS

In a paper called The Role of AI in Political Campaigns: Revolutionizing the Game, Y. Khare discusses the limitations of using artificial intelligence in political campaigns (Khare, 2023):

Emotions and human behaviour: Since artificial intelligence systems cannot fully understand human behaviour and emotions, it could be challenging to accurately predict or influence voter behaviour.

Manipulation and non-transparency: Voters and election-monitoring organizations may find it difficult to assess the impact of artificial intelligence use in political campaigns and identify potential biases or manipulations.

Protection and privacy: The use of artificial intelligence to collect and analyse voters' data raises concerns about privacy and data protection. It is crucial to implement necessary measures to preserve voter privacy and prevent improper use of personal data.

Risk of bias: Bias in the data examined by artificial intelligence algorithms can persist or be amplified, resulting in unfair or discriminatory conclusions. It is crucial to strive to reduce biases and be fair and just in the development and application of artificial intelligence.

Accuracy and reliability concerns: The accuracy and reliability of the algorithms used, along with the quality and quantity of available data, impact how effectively artificial intelligence operates in political campaigns. Technical limitations can compromise the precision and effectiveness of artificial intelligence in political campaigns.

Ethical questions: Various ethical questions arise, including the potential for manipulation, dissemination of false information, and impact on democratic processes when using artificial intelligence in political campaigns. It is of crucial importance to ensure that artificial intelligence in political campaigns is used by moral standards and values.

Accessibility: Soft voters, especially those without access to technology or unfamiliar with digital technologies, may find artificial intelligence in political campaigns challenging or inaccessible. It is essential to ensure that all voters have access to materials and information necessary for participating in the democratic process.

THE FUTURE OF ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS

Artificial intelligence is now an integral part of planning and executing political campaigns. Advisors, along with experts and scientists in the field of artificial intelligence, are studying numerous possibilities and ways to incorporate them into strategies. The application of artificial intelligence in electoral campaigns will certainly increase in the future. Customized software applications, deepfake videos, and bots will largely replace door-to-door campaigns. Negative campaigning will dominate in many campaigns. New pre-election campaigns will use text messages and videos to segment voters on an individual level. There is a high likelihood that voter data will soon no longer remain personal. Election management companies will access all voter data through customized software applications. However, while elections in states will be limited to their boundaries, advertising and election campaigns are now borderless and can be conducted anywhere within and outside the country. In summary, data will lead future electoral campaigns. Citizens will choose representatives who have used more advanced artificial intelligence and machine learning in their election campaigns (Saffulah, N. Parveen, 2022).

CONCLUSION

Artificial intelligence is a technology considered a branch of computer science that studies and develops intelligent machines and software. This field is defined as the study and design of intelligent agents, where an intelligent agent is a system that perceives or recognizes its environment and takes actions to increase its chances of success. With the advancement of information technologies, data has become a crucial resource for managing political campaigns. Therefore, political parties in many countries analyze big data to understand voter profiles. Strategic data will certainly provide the foundation for shaping the strategy of political and election campaigns, candidate selection, and the construction of the party narrative. Undoubtedly, artificial intelli-

ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS

gence has already exerted a dominant influence on our technical culture. Many processes will depend on the capabilities of artificial intelligence and the ability to scale these capabilities in business and life.

Political strategists, along with scientists and practitioners in the field of artificial intelligence, are exploring models for applying AI tools in political campaigns, although we still do not have a complete understanding of these impacts. Alongside the growing influence, there are numerous limitations or negative consequences of the influence and use of artificial intelligence in political and electoral processes. Particularly noteworthy are the areas of emotion and human behavior, voter manipulation, lack of transparency, privacy protection, etc. However, despite all known and unknown consequences, researchers predominantly believe that artificial intelligence is an integral part of planning and implementing political campaigns today, and its application in election campaigns will likely increase in the future.

Taking the above into account, research and a review of current relevant literature confirm the hypotheses set forth. The first hypothesis (H1) suggests that artificial intelligence will significantly transform the way political campaigns are conducted. In the new approach to campaign management, the processing of vast amounts of data thanks to artificial intelligence will significantly impact voter segmentation and their persuasion process (H2). With the increasing importance of artificial intelligence, the role of social media in shaping, implementing, and influencing election outcomes also grows (H3).

As the research has shown, (H4) many artificial intelligence tools can enhance the strategic plans of political campaign implementation and bring political messages closer to the strategic public (target voters). The negative impact of artificial intelligence is associated with the ethical principles of political campaign actors (H5). Undoubtedly, numerous AI tools can have a manipulative and false influence on the true image of candidates and political messages.

To reduce this and strengthen the democratic character of political campaigns, widely accepted ethical principles aimed at serving the public interest must be applied to the use of artificial intelligence in political campaigns. This confirms hypothesis H6.

LITERATURE

Davenport, T. H. (2021), *Prednost umjetne inteligencije*, Zagreb: Mate marketing tehnologija.

Hersh, E. (2015), *Hacking the electorate: how campaigns perceive voters*, Cambridge: Cambridge University Press.

Kaiser, B. (2019), *Targeted: The Cambridge Analytica Whistleblower's Inside Story of How Big Data, Trump, and Facebook Broke Democracy and How It Can Happen Again*, Harper.

Kelleher, J. D. (2021), *Duboko učenje*, Mate marketing tehnologija, Zagreb: MIT press.

Khare, Y.: *The Role of AI in Political Campaigns: Revolutionizing the Game,* https://www.analyticsvidhya.com/blog/2023/04/the-role-of-ai-in-political-campaigns-revolutionizing-the-game/

Mavriki, P., Karyda M., (2019), *Big Data Analytics: From Threatening Privacy to Challenging Democracy,* E-Democracy – Safeguarding Democracy and Human Rights in the Digital Age.

Nickerson, D. W., Rogers T. (2014), *Political Campaigns and Big Dana*, ,Vol. 28, No. 2, Spring, Journal of economic perspectives.

Saffulah, Md., Parveen, N. (2022), *Big Data, Artificial Intelligence and Machine Learning: A Paradigm Shift in Election Campaign*s, in: The New Advanced Society Artifcial Intelligence and Industrial Internet of Things Paradigm, eds.: S. Kumar Panda. R Kumar Mohapatra, S. Panda, S. Balamurugan, Scrivener Publishing LLC.

Powell, C., A. Dent, https://www.cfr.org/blog/artificial-intelligence-enters-political-arena

Sheldon, P.: *Social media – Principles and Application*s, Lexington books, Lanham, 2015.

Tomić, Z. (2023), *Enciklopedijski rječnik odnosa s javnošću*, Mostar, Zagreb: Sveučilište u Mostaru, Synopsis.

Tomić, Z. (2020), *Političko komuniciranje*, Zagreb, Sarajevo: Synopsis.

Tomić, Z. (2016), *Odnosi s javnošću, Teorija i praksa*, Zagreb, Sarajevo: Synopsis.

Tomić, Z., Smeriga, P. (2023): *Politická komunikácia*, Banská Bystrica: Belianum.

Tomić, Z. (2014), *Politički marketing*, Zagreb, Sarajevo, Mostar: Synopsis.

Tomić, Z., Tomić, I. (2021): *Odnosi s medijima: Perspektiva novinara/novinarstva i odnosa s javnošću*, , Vol. 25, No. 1-2, Mostar: Mostariensia.

Tomić, Z., Radalj M., Topić Stipić, D. (2020), *Komunikacija u malim skupinama*, Vol. 24., No. 2, Mostar: Mostariensia.

Tomić, Z., Volarić, T., Obradović, Đ. (2023), *Umjetna inteligencija ChatGPT na testu znanja o odnosima s javnošću – studija slučaja*, Vol. 5, No. 1, Mostar: South Eastern European Journal of Communication, PRESSUM,

Tomić, Z., Volarić, T., Obradović, Đ. (2022), *Umjetna inteligencija u odnosima s javnošću*, / Volume 4, No 2, Winter, University of Mostar, Mostar: South Eastern European Journal of Communication.

Tomić, Z, Grbavac I. (2016): *Political Public Relations – Media and Information Management,* No. 1, Edward Bernays, Zagreb: Communication management review.

Volarić, T., Crnokić B. (2022): *Umjetna inteligencija u obrazovanju i robotici*, Mostar, Sarajevo, Zagreb: Pressum, Synopsis.

Volarić, T., Brajković, E., Sjekavica, T. (2014): *Integration of FAHP and TOPSIS Methods for the Selection of Appropriate Multimedia Application for Learning and Teaching*, 8, New Jersey: International Journal of Mathematical Models and Methods in Applied Sciences.

http://tesi.luiss.it/28468/1/086712_WILLIAMS_ANDREW%20COLE.pdf,

http://tesi.luiss.it/28468/

https://politicalmarketer.com/ai-in-opposition-research

https://www.determ.com/lp-sentiment-analysis/?campaign

https://www.bwf.com/ai-fundraising

UMJETNA INTELIGENCIJA U POLITIČKIM KAMPANJAMA

SAŽETAK

Suvremene političke kampanje u stalnu su tijeku i na njih utječu brojni čimbenici. Glasači su stalno u pokretu, što segmentaciju čini velikim izazovom. Istodobno, razina pismenosti i obrazovanja među biračkim tijelom raste svakim danom, što dovodi do kritičnijeg stava prema procesu uvjeravanja. Osim toga, promjene u tehnologiji i razvoj informacijsko-komunikacijskih sustava izravno i drastično utječu na oblikovanje i upravljanje suvremenim kampanjama. Umjetna inteligencija, strojno učenje i duboko učenje već desetljeće utječu na kreiranje modernih političkih kampanja. Značenje umjetne inteligencije pojačava snagu velikih podataka, algoritama, a time i društvenih mreža. Autori istražuju utjecaj umjetne inteligencije na planiranje i provedbu političkih kampanja te za rezultat određene posljedice za političke kandidate, stranke i društvo.

Ključne riječi: umjetna inteligencija (AI), političke kampanje, veliki podaci, algoritmi, birači, etika.

ARTIFICIAL INTELLIGENCE IN POLITICAL CAMPAIGNS