



Original Article

Implementation of Artificial Intelligence in Political Advertising in Indonesia

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Abstract:

A recent technological advancement that helps meet many of the demands of people in many spheres of life is artificial intelligence. Politics has a role in one of these elements. As an example, artificial intelligence (AI) has started to be used in this context, particularly in Indonesian political campaigns. In more detail, the problems with AI's application in politics pertain to the efficiency, dangers, and obstacles that the field's future technological advancements will have to overcome in order to contribute to a positive transformation of political advertising. The study's findings indicate that there are a number of risks associated with using artificial intelligence (AI) technology for political marketing in the form of political advertising, but there are also advantages for the future growth of political advertising media. Cooperation and community socialization are necessary for the effective and efficient use of AI in politics, including in Indonesia.

Keywords: Political Advertising, Effectiveness, Obstacles, Artificial Intelligence.

Introduction

With the increasingly fast internet flow accompanied by the ease and convenience it offers, it has changed the communication model/method of Indonesian society. In line with the demands of the current industrial revolution 4.0 which requires its people to carry out their daily activities digitally, Indonesian people have begun to adapt to these demands. The characteristics of a digital society or what we are more familiar with as "digital society" is an important sign of the rolling era of the industrial revolution 4.0 which presents new challenges in various aspects of life, including in political communication.

Internet access does not seem to be something new for Indonesian people. Based on data stated by APJII, the number of Indonesian people who are connected and carry



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out daily activities with the internet in 2021 reached 272,682,600 people out of 210,062,769 people in Indonesia ([Arif, 2022](#)). Indonesian people, who have a national telephone code of +62, are qualified as social media users with a large portion and number. This is proven by the fact that from a time span of 8 hours 36 minutes connected to the internet network, Indonesian people spend 3 hours 26 minutes using social media ([Pertiwi, 2018](#)).

This gives us an idea of the enormous digital space in Indonesia. So from this it also proves that the use of this large social media is one of the triggers of problems also related to political contestation in Indonesia, especially in the context of political advertisements as a form of political marketing ([Nofiard, 2022](#)).

In relation to political advertising, the great attention of the Indonesian people to digital space encourages politicians to make digital space a fertile ground to gain votes and public sympathy. If not addressed wisely, political contestation with the use of digital media, including political advertising in it, has the potential to cause tension and social conflict in society ([Shahreza, 2018](#)). The development of this kind of communication model has changed the behavior and perspective of the Indonesian people both economically, socially, culturally and politically. In relation to the world of politics, the great attention of the Indonesian people to digital media is a distinct advantage for politicians in the country to build political communication in the digital space. The freedom to share information provided through digital media is the main strength/supporting factor that cannot be avoided for politicians to convey their interests and influence in order to build a good opinion of themselves in the eyes of the public.

All the gestures and political interests needed will be easily channeled through digital media, including for example social media. In relation to the explanation above, of course the implementation of politics is closely related to political advertising. Basically, branding/marketing of political advertising that starts from the advertising creativity process to determining targets, both individual and collective, which depends on the sophistication of Artificial Intelligence technology can be likened to two sides of a coin. On the one hand, targeting individuals is considered an optimal and more economical method. This fact makes more and more independent political candidates and candidates with limited capital to participate in the political constellation, from the district, city, provincial, and national levels. However, what is also important to note is that the adaptation of Artificial Intelligence which aims for improvisation, marketing/branding, both individual and collective in political advertising can also be a serious threat to the democratic system. Therefore, an approach is needed from both the government and society from various sides so that the use of Artificial Intelligence as a new technology can accommodate the creation of the distribution of political marketing in the form of political advertising to the public effectively, transparently, healthily and conductively for the realization of a fair democratic system.

The study and analysis of the use and utilization of digital media, including political advertising in it, which ultimately leads to political marketing is interesting to study because by analyzing and understanding the phenomenon of political advertising through digital media which is currently also part of the development of Artificial Intelligence (AI) technology, it can also be known how political communication through this digital platform can be carried out in such a way that Artificial Intelligence (AI) technology which has begun to be embedded in digital media technology today and in the future, can be used as a platform for how to utilize digital media technology related

to political communication in Indonesia. can guarantee that the political process in Indonesia will run more effectively, healthily and conducive in the future.

Methods

The research method used in this paper is a qualitative method. This research is qualitative. According to [Creswell \(2019\)](#), It includes essential steps, such as formulating questions and procedures, collecting data from participants, analyzing data inductively from specific themes to general themes, and interpreting the meaning of the data. In other words, qualitative research methods aim to explain a phenomenon through in-depth data collection. The author will apply a qualitative descriptive approach. This approach emphasizes an in-depth description of a phenomenon, such as behavior, attitudes, or experiences, to understand the phenomenon's characteristics, context, and meaning without relying on numbers or statistics ([Moelong, 2008](#))

The author analyzes the effectiveness, risk, and challenges of implementing Artificial Intelligence in relation to advertising and various other media platforms that are relevant to the political constellation. In other words, through this research method, the author also observes to what extent the implementation of Artificial Intelligence (AI) which is already embedded in various digital media technologies today can be attempted in such a way that it can create a more effective, healthy, and conducive political system for the future. This will also be examined by looking at the political messages conveyed by politicians through political advertisements that are disseminated through various media platforms and digital spaces, in which the data is also transformed through Artificial Intelligence (AI). So that with the development of this modern technology, the political message or communication that wants to be conveyed can still be understood, touch and influence the thoughts, emotions, and actions of the community according to the political interests that are targeted. Through this research method too, the application of Artificial Intelligence (AI) through political advertisements will ultimately indirectly also be related to the socio-legal order of the development of democratic politics in society. In other words, the application of Artificial Intelligence (AI) through political advertising must also be accompanied by a balance with existing social rules/norms, both written and unwritten. So that the political message conveyed through the use of Artificial Intelligence (AI) technology attached to political advertising as part of the current digital data-based political marketing system, can be attempted in such a way that the political message is still conveyed clearly, quickly, effectively, and easily understood by the people while still adhering to applicable social, ethical, moral, and legal rules/norms.

Results

AI in Political Advertising

One branch of Artificial Intelligence (AI) that has been well developed and adopted in political advertising is machine learning. Machine learning can be trained to imitate human decision-making in the process of segmenting or targeting advertising messages. Machine learning, which is a set of algorithms, can capture data without relying on rule-based programming. However, it is automatically connected to gadgets that have an internet connection, so that it can automatically perform analysis like humans according to what has been learned and experienced.

The fact that machine learning can automatically imitate human judgment is made possible by a branch of machine learning known as deep learning, which allows machines to learn and analyze not only through good data grouping, but also by seeing and capturing important features related to the input.

Therefore, Machine learning as artificial intelligence can collect various types of data in large quantities and provide conclusions from the data. Because every political campaign wants to try to get into the "thinking" of the audience. As Artificial Intelligence, the more they know about the target audience, the more they can influence the content of the audience's thoughts and actions.

For a long time, marketing and political campaigns were completely dependent on target demographic data. Now, thanks to machine learning and digital data-driven creative strategies, it is possible for ads to interact with audiences directly and personally. The basis of the psychographic model for describing human character can be predicted through the five big personality traits known as OCEAN which have been formulated since the 1980s and have become a basic technique in psychometrics. Based on these facts, analysts can provide an idea of how likely we as an audience will react to a particular message ([Madanapalle, 2020](#)).

Understanding Political Advertising Mediums

Social media has replaced traditional political marketing strategies/methods that emphasize 'push' strategies to 'pull' strategies that can be personalized more effectively. If the 'push' advertising strategy/method is considered a type of traditional political advertising strategy and relies on various targeting options. This is different from the 'pull' method associated with search engine advertising that has keywords as a form of activation. This strategy/method allows analysis in the form of personalized messages and strategies that exceed the function of awareness or interest building which can help build 4R, namely: Relationship, Relevance, Resonance and Response. Through 4R, political marketing becomes more effective, accurate, and interactive in delivering political advertising messages to listeners/audiences that have been targeted both on a small/individual and collective scale. This has long been dreamed of by traditional methods but has never been achieved before the advent of the internet ([Hughes, 2018](#)).

The ability of digital media to personalize and make political advertising relevant as well as the ability of the media to set various messages and agendas for a personalized social media framework has succeeded in changing the perspective of society in responding to this information. If the exchange of information on traditional television advertisements in the past was only possible through word of mouth or what is known as the water cooler conversation strategy) ([Fayard, & Weeks, 2007](#)) in the modern era today, advertisements are widely spread through social media and can be shared through users of social media platforms quickly. A message can be immediately liked, commented on with words and emoticons, and can be shared with others, especially between friends who are already affiliated with us as fellow users on social media. In relation to politics, this fact has changed the way information is disseminated and allows for deeper personal relationships during the political campaign process.

Social Media Platforms in Handling Political Advertisements

It is very important for political parties to state firmly and specifically how they allocate their funds for marketing through advertisements made online, especially on

social media, so that it can also be traced in relation to advertising spending limitations simultaneously with advertisements on conventional media such as television, print media or radio. With transparent allocation of advertising spending funds, the public can find out the reasons for certain propaganda carried out on various media platforms. Independent organizations such as fact-checkers, investigative journalists, researchers, audit bodies, and regulatory bodies that can conduct investigations and trace the parties spreading online messages as well as what messages are conveyed are important to be included in this transparency.

Some social media platforms state that they have or invite third parties as fact-checking teams or third fact checkers. However, there are still many loopholes found in relation to the policies implemented. For example, Facebook's policy that requires advertisements to be investigated and checked by third parties does not apply to political advertisements. This provides an opportunity for politicians to campaign for advertisements by spreading fake news or hoaxes. Facebook stated that they provide an exception for political ads and campaigns that are published on official accounts. Facebook argues that this is done so that the public can determine which politicians can be held to their political promises.

Lately, Facebook has required political ads to include identity, address, official website, official email and registered user/ID in tax to check the perpetrators behind political ads. However, Facebook has not yet removed the custom audience feature. So, politicians can still use Facebook account data to synchronize profiles with voter data. Instagram also still allows political campaigns on their platform, on the condition that they must include information about the capital owner who financed the advertisement and the existence of funding in the advertisement content with a statement that the advertisement has sponsored status.

Unlike Facebook and Instagram, which still provide ample opportunities for politicians to utilize user/account data and place advertisements on social media platforms, Twitter recently made a significant breakthrough, precisely on November 22, 2019, Twitter officially banned the placement of political advertisements on its platform. Twitter prohibits all forms of political advertising that include content that refers to political candidates, political parties, general elections, or certain laws. On the other hand, Google limits the determination of target audiences only to age, gender, and location based on zip code. This results in limiting the ability to search for targets on a small scale (micro teaching) for political advertisements on the Google search engine and YouTube. In addition, Google also removed the customer match feature that allows politicians or advertisers to synchronize profiles with voter data ([Google. Political content., 2020](#)). In relation to the explanation above, the tendency to use digital media in conveying political messages has given rise to a new term, namely digital democracy. In the journal written by Witawan, Mudana, Sitompul, Nur and Purnawibawa (Witawan & Mudana, 2021), six views of digital democracy are presented based on the use of digital media for political communication which are divided into two dimensions, namely:

1. Government-centered view
2. Citizen-centered view

For the first point, according to this view, important problems related to the lack of information disseminated by the state can be solved with the help of digital media. With the help of information and communication technology, the state will work more effectively. Then as a form of explanation of the second point, this view emphasizes the

use of digital media as a network to conduct electronic polls and referendums to create a digital discussion space.

Policy and Consequences of AI Adoption in Political Advertising: Towards a Public Space Guided by Algorithms

The implementation of AI in political campaigns/advertisements provides the possibility of various participation of political parties and candidates to transform data into political advertising strategies/methods. The adaptation & implementation of AI has a significant impact not only on the data analysis process, but also on the strategy of selecting the right container/platform for advertising. However, on the other hand, AI-generated content can also cause misinformation, mostly through fake accounts/social media bots that flood online platforms with hoax/lie information ([Bartlett, 2018](#)).

Fake news/hoaxes and hate speech that are carried out unintentionally or unexpectedly by the creator or spreader of the message will have a negative impact on the digital ecosystem. For example, Indonesia faced a sharp increase in hoaxes by 61% between December 2018 and January 2019, ahead of the Presidential election on April 17, 2019. 45% of this number was spread via Facebook. In March 2019, the Indonesian Ministry of Communication and Information found 700 hoax news related to the election and fake accounts/bots on Twitter that were used to spread hoax/lie news about political candidates ([Grüne, 2019](#)). As explained earlier, social media platforms can provide their own color in the form of personalization to political campaigns and messages. The implementation of social media as a political campaign medium is considered as creativity and a new breakthrough, especially with the current digital technology capabilities that can no longer be done by conventional platforms in building 3 or 4 dimensions. However, the message quality strategy in the form of personification that is adjusted to the voter group to suit and stimulate the emotions of the audience aimed at answers or feedback by spreading messages, can also encourage public polarization or what is known as a filter bubble. This can create a similarity of information where certain messages are only used by users of certain platforms/media that are in accordance with their idealism. Instead of providing diverse information, personal advertisements like this will result in a media ecology that has a one-dimensional status. This has a negative impact on the critical thinking skills of the audience/listeners and also has a negative impact on their online political behavior ([Merlyna, 2017](#)).

What is even more worrying is when search engines and social media algorithms (for example Google and Facebook) then give rise to and form polarization in cyberspace which is then brought into the realm of public reality. Advertisements on social media that use the 4R strategy that only displays advertisements related to issues that are of concern and interest to users, will ultimately only raise issues related to certain races, religions, and ethnicities which will ultimately result in online polarization and create what is known as social media bubbles. Furthermore, online segregation or separation brought into the public space will create "bubbles" of ethnonationalism and sectarianism. In addition, bubbles or echo chambers will also create a paradox of double "freedom". (Panagopoulos, 2015) On the one hand, this fact creates "freedom of expression" which is relevant to the principles that apply in the public, namely quality political deliberation. But on the other hand, it also creates "freedom to hate" which in addition to having a negative impact on the quality of public space and democracy, also widens political polarization, which is carried over to the real public realm.

Data Privacy in the Era of Data-Based Political Campaigns

The opportunities and risks of online microtargeting are currently controversial topics, especially after Donald Trump's victory in the 2016 US presidential election and the case of Britain's exit from the European Union or Britain Exit (Brexit) in more or less the same year. This has made social media users pay more attention to data privacy issues. Micro-targeting, as previously mentioned, is not a new strategy/method in political campaigns. Microtargeting was only implemented on a limited basis in the US Federal Election in 2000 by the Republican Party.

Currently, microtargeting is a standard campaign method for both online and offline campaigns in the United States to address problems that cannot be solved by traditional political advertising methods ([Papakyriakopoulos, Hegelich, Shahrezaye, & Serrano, 2018](#)). Since 2000, political campaigns have also used data-based marketing systems and "customer relationship management," like the goods and services sector. (Warner, 2013)

Gadgets, especially smartphones and tablets, are the main gateway to accessing personal data of account users because targeting can occur 24 hours a day inside and outside the home. This is supported by the migration of humans to the digital environment that allows access to digital traces that provide knowledge about human behavior. This has the potential to use this data to achieve more personal goals/targets. Various types of personal data such as age, gender, occupation, education level, and even a person's personality can be predicted and investigated through their search history in the digital or virtual world.

In addition, personality can be predicted and traced according to the content of personal websites, music collections, Facebook and Twitter profiles, such as the number of friends on social media, network density, and the language style used by the audience/listener ([Kosinski, Stillwell, & Graepe, 2013](#)). The division of psychological aspects that are personal in nature which consist of personality, consumer behavior, to very personal data from social media can be easily obtained only through the user's smart device. The fact shows that the personality of each social media user can be effectively recorded and analyzed to become a serious problem related to personal data protection. As defined by the General Data Protection Regulation (GDPR), (General Data Protection Regulation (GDPR) Art. 4 Definitions, 19) personal data is any information related to an identifiable 'natural' human being. If we talk about user data information, then it is also indirectly related to personal identity such as name, official identity number such as KTP or KK number, location data, email address, or one of several unique characteristics, which indicate the physical, physiological, genetic, mental, commercial, cultural or social identity of the individual. So in its implementation, personal data can include all data that can be provided to third parties by various methods. For example, telephone numbers, credit cards, or personal data numbers, account data, license plates, physical characteristics, telephone numbers or customer addresses, and IP addresses are included in this definition of personal data. 2018 was the year when personal data became the most frequently discussed term.

More than 87 million US and UK citizens have reportedly had their personal data harvested for psychological profiling purposes, with user data used for microtargeting with political messages and hoax information/fake news in Brexit and Trump. Several countries have taken important steps through organizations that focus on personal data

protection, such as the GDPR implemented by Europe, the US with the California Consumer Privacy Act (CCPA) and India in the Personal Data Protection Bill ([Welberry, 2019](#)). Other countries such as China, Brazil, Canada, Japan and South Korea have also passed, revised and activated national personal data protection laws that will be effective starting in 2020.

A number of countries implement national regulations according to their respective national interests, but have one important goal in 2020, namely related to consumer or user rights, such as cookies. And ensure that personal data obtained and collected through companies is only for the benefit of consumers followed by data misuse and ethical issues. ([Staff, 2019](#)).

Artificial Intelligence:

Benefits, Threats, and Future Predictions for Political Advertising

There are a number of debates and concerns regarding Artificial Intelligence technology that ultimately focus on the question of whether this technology will replace human jobs and abilities in the future? However, what is often overlooked by netizens is the impact of Artificial Intelligence (AI) in processing digital footprints, especially through social media which is used for targeting and advertising personification. We may enjoy the convenience provided by machine learning capabilities as a form of artificial intelligence in "learning" our "click" habits, which then produces references that are tailored to our interests and needs. Now AI also allows political parties or candidates from all elements of society to efficiently transform data into political campaign and advertising strategies. Like other aspects of life, AI can help reduce the burden of costs by minimizing the use of human labor in political campaigns. AI can also interact directly with prospective voters and produce new methods/ways of disseminating information that allows for deeper emotional connections. If the right message is delivered to the right target voters and is also coupled with a positive message, then it is considered to be able to stimulate the public to participate in politics by exercising their right to vote, as well as instilling trust in a democratic system of government. This can then encourage passive potential voters to become active, who are not only involved but also have a deep emotional connection through the campaign process ([Hughes, 2018](#)).

Although AI practices are clearly very effective in disseminating and communicating political messages as machine learning, it needs serious attention because it has the potential to threaten democracy by eliminating people's reasoning and critical thinking. This is because today's political advertising that uses social media as an important medium, not only utilizes AI technology to decide the right media or channel as a path to communicate information messages, but also in the process of dividing/segmenting the message itself. Integrated and consumer-centered political advertising raises ethical issues, such as personal data protection, data monopoly, and data misuse by two digital gangsters such as Google and Facebook.

The My Personality application is one example of evidence of the existence of Artificial Intelligence as Machine Learning. Users of the MyPersonality application do not know that their personal data has been taken for advertising/political campaign purposes. Kosinski, as one of the inventors of the Mypersonality application, once predicted that the use of big data that is 'hijacked' through social media "has the potential to pose a threat to individual welfare, freedom, or even human life ([Grassegger & Krogerus, 2017](#)).

Personification of messages will ultimately give rise to polarization in the online public sphere and form a social media bubble. The worst situation that can occur is when the polarization of the online world is brought into public reality. Messages that are personified and directed at certain groups or individuals are considered more emotional, including negative messages in the form of hate speech, anger, frustration and prejudice. This effort is made to mobilize voters and create closeness and involvement between the audience/listener and the advertising message.

In fact, this approach has long-term effects on the health of democracy. (Bartlett, 2018) In the future, the adoption of AI in all aspects of political campaigns cannot be ignored. Cooperation between various multi-stakeholders is needed, from social media platforms that have user data, governments that have legal authority as rulers, users, and community organizations to work together to create a healthy and conducive democratic ecosystem ([Will Mathias Georg, 2015](#)). This is because self-regulation of social media platforms alone is not enough, there are even many loopholes in the regulation. Finally and most importantly related to regulation, companies that have data such as Facebook and Google need to pay special attention to regulations related to users.

Artificial intelligence can also be used to test the truth of political propaganda. In relation to this, of course advertisements made using AI can also be adjusted in such a way that even though in reality politics is trying to lead public thought and opinion towards a particular party or candidate, through AI, such political propaganda can be relatively adjusted so as not to conflict with violations of social norms and legal rules that apply in society, both written and unwritten. So the implementation of AI in this case in relation to political advertising, will continue to create and maintain healthy and conducive political stability.

In relation to the explanation above, seen from several cases, AI can be used to test the truth related to political propaganda. Natural Language Processing (NLP) technology used in AI can help analyze and process information/data contained in political propaganda messages, such as political speeches, political advertisements, or links on social media.

In its implementation, NLP technology can be used to identify arguments and claims contained in political propaganda, check the accuracy of the facts contained in the message, and then evaluate the sentiment or tone of the message. For example, an AI program can be programmed to identify and analyze words, sentences, or phrases that often appear in political propaganda that have the potential to be misleading or manipulative.

This means that the combination of AI technology and human capabilities is an effective solution in adjusting political propaganda according to the norms and rules of social life in society. AI technology can help process data and conduct analysis, while human capabilities are needed to understand the context, goals, and strategies of political propaganda that emerge.

The implementation of AI technology in filtering/adjusting political propaganda can be done by synchronizing various analysis techniques and algorithms, such as NLP, sentiment analysis, and data processing. The analysis produced by AI technology can be further traced by communication experts or political experts to identify whether the propaganda message contains manipulative elements, spreads lies/hoaxes, or is misleading.

Conclusion

In the future, the adoption of AI in all aspects of political campaigns is inevitable. Multi-stakeholder cooperation is needed, from social media platforms that have user data, governments that have legal authority, users, and community organizations to work together to create a positive democratic ecosystem. This is because self-regulation of social media platforms alone is not enough, there are even many loopholes in the regulation. Lastly and most importantly related to regulation, companies that have data such as Facebook and Google need to pay special attention to regulations that favor users.

Suggestion

In conveying this political message, a means is needed so that the intended political message can be disseminated and understood well and efficiently by the public. In Indonesia, the use of media and digital space in the form of political advertising as a means of conveying political messages carried out through political communication activities has become a commodity or main field for all political figures in Indonesia. The use of media and digital space in the form of political advertising in carrying out political communication is considered better because digital media offers easy access and speed of dissemination of information through political advertisements made by politicians. Thus, through the implementation of Artificial Intelligence (AI) in political advertising that has begun to be carried out intensively at this time, especially in Indonesia, and in the future through various existing digital technology platforms, it aims to ensure that the interests and political influence of politicians can be conveyed more effectively to the public without having to spend a large budget. In order to realize the use of Artificial Intelligence (AI) technology in political marketing, including political advertising in it, both the government and all levels of society must be actively and simultaneously involved in the social, normative, political, and science and technology realms in order to continue to encourage innovation efforts and further technological development in the future, so that the transformation of society, especially in the political field through the application of Artificial Intelligence (AI), can be achieved faster and optimally.

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