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Netizen's Perceptions Of The Influence Of Artificial Intelligence In Communicating Government's Policies And Drug Law Enforcement

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Abstract

This paper examined the Netizens' perception of the influence of Artificial Intelligence in communicating government's policies and drug law enforcement. Given rise to this study is the fact that participatory democracy requires that the citizens must be carried along, by the government, in policy formulation and implementation. The citizens need to be aware of these policies and their feedback required by the government. Supports from the citizens for the success of government policies, programmes and activities are critical issues in governance, hence the need for effective communication platform between the government and the governed. Thus drug law enforcement policies are successful to the extent that the citizens have full knowledge of the laws and the punishments against offenders. Since Artificial intelligence is widely used for education purposes and cognitive intelligence, it becomes imperative for communicating government policies and drug law enforcement. Aimed at finding out if artificial intelligence can influence citizens' buy-in in government policies and drug enforcement, this paper will be based on the agenda-setting theory and the social responsibility theory. The study adopted a survey research approach and used the undergraduate university students in Anambra State as the population for the study. A sample of 398 undergraduate students was drawn from the population of 119,654 undergraduate university students in Anambra State. The Likert scale questionnaire type was the instrument for data collection while the data collected were presented in tables and simple frequency distribution. Results obtained from this study revealed that awareness of the use of AI in governance and drug abuse was high among the respondents. Results also revealed that the use of AI in governance can bridge the gap between the government and governed in the drug law enforcement.

Key Words: Netizens, Perception, Artificial Intelligence, Communicating, Government, Policies, Drug, Law, Enforcement

Introduction

In 1964, the Canadian communication scholar and theorist, Marshall McLuhan, coined the expression, "global village", when he saw different media working less plausibly together to make information and experience freely available for all to share (McQuail and Deuze, 2020). Focusing on how each new medium transcends the boundaries of experience reached by earlier media and contributes to further change, McLuhan drew attention to the implications of a shift from a purely oral communication to a one based on a written language and thus proposes that as more as our senses are engaged in the process of taking messages, the more involving and participatory the experience is (West and Turner, 2020). A cursory look at the media evolution from the stone age, books and printing era, radio, motion pictures, television, to films, will constantly remind us of how international the media have become and how the flow of news and culture encompasses the globe and draws us into a simple "global village" (McLuhan 1964)

According to God's Presence (2020), the globalized media industry, which gives rise to the global village, is associated with the internet technology. Okafor, Dunu, and Ekwugha (2021) corroborate the significance influence of the internet in the globalization of the media industry and posit that software technology is the driving force for digitalization. With the advent of the internet, what existed as boundaries, separating countries, have become, practically, non-existence. As a result of its potentials and capacity, the internet has brought with it a lot of opportunities and landmark developments in the communication world. For instance, the digital technology, which was created by the internet pervades almost everything in one daily lives. The cell phones and other types of wireless communication, television, radio, process control, automotive electronics, consumer electronics, aircraft navigation, among others, depend heavily on digital electronics (Floyal, 2015).

With the foregoing potentials and capacities of the internet, Current (2012), cited in Oyokunyi and Udust (2018) asset that the internet would make the world a better place to live. Arguable, the role of the internet in making the world a better place may not have been met, it however suffices to say that the phenomenon of the online usage across countries and culture have shown that the internet is providing more and better ways of putting to use old tricks and methods in ways that enhance social being and personalities.

Artificial Intelligence (AI), is one of the trending technological innovations that is making great in-road in virtually all aspects of human endeavours, and there seems to be no limit in the application of AI in the society. In health care delivery services, agriculture, industries, journalism, media operations, criminology, aero services, among others, AI has made significant improvement on service delivery. The art and science of governance is today witnessing great influence of Ai. In 2023, the National Audit Office (NAO, 2024) reported that the Cabinet Office's Central Digital and Data Office (CDDO), along with the Department for Science, Innovation & Technology (DSIT) and HM Treasury, started working on a strategy for adopting Artificial Intelligence (AI) in the public sector. The draft strategy outlines four key objectives:

- The UK public sector will be world-leading in safe, responsible and transparent use of AI to improve public services and outcomes.
- The public will benefit from services that have been transformed by AI and will have confidence that the government's use of AI is responsible.
- Public and civil servants will have the tools, information and skills they need to use AI to deliver better outcomes.
- All public organisations will be more efficient and productive through AI adoption and have the foundations in place to innovate with the next wave of technologies.

AI presents the government with opportunities to transform public services. The centre of government has identified the potential for large-scale productivity gains from the adoption of AI across the public sector. For the foregoing reasons, therefore, government agencies have started investing in AI technologies to solve various public sector problems, including effective and efficient communication of government's policies, programmes and activities. In justifying the increasing demand for AI in government, Sajid (2023), cites Deloitte Survey as stating that

- 70% of business leaders support AI-driven government projects
- 80% of government agencies are at the initial or developing stages of reaching digital maturity
- By 2024, 75% of governments will have at least three enterprise-wide hyper-automation initiatives launched or underway

Against the potentials, it therefore becomes germane to examine netizens' perceptions of the influence of artificial intelligence in communicating government's policies and drug law enforcement.

Statement of the Problem

Government exists for the people, and for the people to be considered as being part of the government, the people must queue into the policies, programmes, and activities of the government. This requires effective communication between the government and the governed (citizens). The citizen must be made to understand the government's policies, because the success of any government policy is dependent on the buy-in into the policy by the people. Therefore, with regard to the drug law enforcement, the citizens have to be sufficiently educated on the health hazards associated with drug use, as well as the punishment for offenders. Since the Netizens are internet compliant, this paper is set to find out their perceptions of the influence of artificial intelligence in communicating government's policies and drug law enforcement. It is a subject of empirical study how effective AI has been in making the people to be aware of government's policies.

Objectives of the Study

The overall objective of this paper is to evaluate the Netizens' perceptions of the influence of artificial intelligence in communicating government's policies and drug law enforcement. The study will achieve the under-listed specific objectives:

1. To find out if the respondents are aware of the use of Artificial Intelligence to communicate government's policies and drug abuse.
2. To ascertain if the respondents perceive AI as being able to bridge the communication gap between the government and the governed in policy formulation and implementation.
3. To determine if the respondents perceive AI in communicating government's programmes and drug abuse as effective.

Theoretical Framework

The study is hinged on the Technological Determinism Theory. The American Sociologist and Economist, Thorstein Veblen (1857-1929) coined the term, "Technological Determinism," as a theory subscribed to by hyperglobalists, who claim that as consequences of the wide availability of technology, accelerated globalization is inevitable. Technological Determinism theory has been summarized by Merritt Roe Smith, (1994), in Heder (2021, p.119), as "the belief in technology as the key governing force in society". Again, Bruce Bimber (2000), cited in McQuail and Dueze (2019), summarized Technological Determinism Theory as the idea that technological developments determines social change… It changes the way people think and how they interact with others and can be described as a three-word logical position: technology determines history."

Langdon Winner (2001) provides two hypotheses for the technological Determinism Theory:

1. The technology of a given society is a fundamental influencer of the various ways in which a society exists; and
2. Changes in technology are the primary and most important source that leads to change in the society.

The technological Determinism theory is suitable for this study because the evolution of the media of communication has great impacts on the society. This is reflected in the statement by McLuhan (1964) that "the medium is the message" which means that the medium used to communicate influences the mind of the receiver. The introduction of news print, television, computer, internet and AI have all shown how technological advances impact on the society.

Literature Review

What is Artificial Intelligence?

Artificial intelligence (AI) can be, broadly defined as a software that enhances and automates the knowledge-based work done by humans. Sraders (2019) sees AI as the science and engineering of making intelligent computerised machines that are programmed to closely imitate human thoughts and actions for the purpose of analysing data to address a variety of problems or execute tasks. It

is a computer science filed that ensures the creation of intelligent computerised machines which are enabled to perform tasks, which normally requires human intelligence.

Ali and Hassoun (2019) posit that AI means the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. According to Crespo (2018), artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Crespo (2018) adds that specific applications of AI include expert systems, natural language processing, speech recognition, and machine vision. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience. Since the development of the digital computer in the 1940s, it has been demonstrated that computers can be programmed to carry out very complex tasks—such as discovering proofs for mathematical theorems or playing chess—with great proficiency. Adjei (2020) informs that AI is made up of a large variety of sub categories and areas in which they are applied some of these sub categories and the advanced abilities they offer include:

1. Machine learning: machine learning mimics human learning patterns, to gain an understanding of unstructured data sets and generate intelligent decisions such as medical decision making, Healthcare analytics, Bioinformatics, Emotional detection, Fraud detection, Cyber Security, Procurement optimization, Customer interactions and Optimised gaming.
2. Natural Language Processing (NLP): this permits an accurate analysis of data sets and communication of insights that touch on Communication systems, Legal assistants, Cognitive retail, Personal assistants and Web speech
3. Machine perception: simulate the human perception of the environment and extracts information from different data sources. For example, Medical imaging, Manufacturing, Service industry, Financial industry, Autonomous delivery, Transit safety, Geospatial analytics and Childcare.
4. Predictive analytics: analyse historical data to predict future outcomes. For examples, Marketing, Data extraction, Social Network analytics.

In general, AI systems work by ingesting large amounts of labeled training data, analyzing the data for correlations and patterns, and using these patterns to make predictions about future states. In this way, a chatbot that is fed examples of text can learn to generate lifelike exchanges with people, or an image recognition tool can learn to identify and describe objects in images by reviewing millions of examples. New, rapidly improving generative AI techniques can create realistic text, images, music and other media.

Depending on the type of work it is being applied to, AI can be described as either narrow or general. Narrow AI describes the application of AI to individual tasks that are repetitive or based on patterns, whilst general AI aims to create a machine that is capable of performing all the intellectual tasks of the human brain.

Artificial Intelligence and Governance

NAO (2024) explains that the capabilities that AI presents in governance are wide-ranging and interconnected, but adds that there are four clear techniques that AI programs can deploy to improve both the outcomes governments seek to achieve and the way in which they make policy:

1. Predictive analytics

2. Detection

3. Computer vision

4. Natural language processing

1. Predictive analytics: Better predictions can enable governments to implement preventive and/or more targeted policies. For example, by using massive training datasets to select the attributes that best predict an unknown function such as an inmate's risk of reoffending, AI can help both policymakers and frontline civil servants to make predictions in a way that is more comprehensive and less subject to human bias.

The second goal is to provide predictions on the basis of incomplete information. For instance, predictive analytics can be used to map a complex decision tree of all possible outcomes, which will then simplify human decision-making.

2. Detection: Here, the goal is to automatically detect individual data records (such as a fraudulent transaction) or patterns (such as a relationship between a mode of hospital care and a health outcome) within massive and complex datasets in order to identify those that are abnormal or unusual. There are two main benefits in using AI for these detection tasks. First, detection MLAs help government officials to identify important patterns that might be causal. Second, detection MLAs help government achieve an unprecedented level of situational awareness. For example, a city official may want to know whether, taking account of the variables that affect a system, there is an abnormality in a specific area of the city, such as a higher density of toxic particles in the air.

3. Computer Vision: Computer vision (CV) enables the collection, processing and analysis of any digital image data from various sources such as satellite and aerial images and digital video. In such contexts, the goal of an AI programme is to find unsupervised methods of feature recognition; identify objects, actions or characteristics; describe content; and, overall, automate labour-intensive cognitive tasks that would usually require human supervision.

Traditionally, governments have used CV for things like traffic control (e.g. automated number plate identification technology) and policing (e.g. fingerprint matching). More advanced applications such as the analysis of MRIs or CT scans have been limited, due to low accuracy rates and low processing speed. However, deep neural networks, which are the various “layers” that make the algorithm work from input to output, have seen the accuracy of CV leapfrog human level ability in certain areas.

4. Natural language processing: Natural language processing (NLP) makes it possible for machines to process and understand audio and text data to automate tasks such as translation, interactive dialogue and sentiment analysis. Machine learning has enabled NLP research to evolve from the meaning of individual words to the meaning of sentences and even narrative understanding, which enables machines to process wells of unstructured text data and derive meaningful insights.

Government interest in testing these technologies has concentrated on two areas: firstly, to mine public sentiment and expert content regarding citizen preferences and information related to policy propositions or implementations; and secondly, to deploy highly advanced applications of NLP for surveillance and biometric identification.

Empirical Review

Yigitcanlar, T., Degirmenci, K., and Inkinen, T. (2022), in a study with the title, "Drivers behind the public perception of artificial intelligence: insights from major Australian cities," aimed at bridging the gap between the limited knowledge on what the drivers behind the public perception of AI are . This is against the background that Artificial intelligence (AI) is not only disrupting industries and businesses, particularly the ones have fallen behind the adoption, but also significantly impacting public life as well. This calls for government authorities pay attention to public opinions and sentiments towards AI. Methodologically, the study conducted an online public perception survey with the residents of Sydney, Melbourne, and Brisbane, and explores the collected survey data through statistical analysis. The analysis reveals that: (a) the public is concerned of AI invading their privacy, but not much concerned of AI becoming more intelligent than humans; (b) the public trusts AI in their lifestyle, but the trust is lower for companies and government deploying AI; (c) the public appreciates the benefits of AI in urban services and disaster management; (d) depending on the local context, public perceptions vary; and (e) the drivers behind the public perception include gender, age, AI knowledge, and AI experience. The findings inform authorities in developing policies to minimise public concerns and maximise AI awareness.

AI tools have been in use for years – and not just by tech startups, but just as often in the public sector. State and local governments have already been employing AI to complete a range of tasks more efficiently and effectively: sifting through vast amounts of data, automating bureaucratic processes, and identifying and responding more quickly to public safety threats. Now, as the underlying technology continues to improve and its applications multiply, the question isn't just how exactly governments will regulate artificial intelligence – it's also how exactly governments will deploy it.

Governmental bodies use AI to help prevent cyberattacks and detect public health threats. AI is deployed by law enforcement to identify potential offenders and by local and state agencies as a screening and predictive tool – although there's sharp debate about whether such efforts do more harm than good. And even as they work out their kinks, chatbots are being used to serve constituents, companies and other stakeholders that interact directly with government offices. The domain where government use of artificial intelligence has perhaps generated the most alarm is in law enforcement, amid fears of ever-expanding surveillance capabilities. In view of the foregoing this present study is set to evaluate the Netizens' perception about the use of AI in communicating government's policies and drug abuse.

Methodology

Survey research approach was used. Survey research was considered suitable because it focuses on people, the vital facts of people, and their beliefs, opinions, attitudes, motivations, and behaviours. Again, the choice of survey research for this study was that surveys attempt to determine the incidence, distribution, and interrelations among sociological and psychological variables (Osuala, 2013). The geographical area covered by this study was Anambra state, located in the south eastern state of Nigeria (Ibenegbu, 2017). The state borders Imo state to the east, Delta stateto the West, Enugu and Kogi states to the North, and Abia state to the South (Ogbu, 2020). Anambra state has her seat of power at Awka and her commercial nerve centers at Nnewi and Onitsha. Furthermore, the state has twenty one local government areas, seven in each of the three senatorial zones. Anambra state has one federal university, the Nnamdi Azikiwe University, Awka -one state University, the Chukwuemeka Odumegwu Ojukwu University, Anambra state, and three private universities - Madonna University, Okija, the Pauls Universitty, Awka, and the Tansian University, Umunya. The choice of the area is because the researcher is from the zone, and has lived in the zone from birth till date. Consequently, the researcher is familiar with the culture, religions, economics and sociological pattern of life of the people in the area.

The population of interest for this survey study was 119,654 university undergraduates in the state (www.statistica.com, and www.4iou.org). A sample size of 398 undergraduate university students was determined for this quantitative study, using the Taro Yamenis statistical formula

The Multi-stage sampling strategy was adopted for the study. Considering the target respondents for this study, the target respondents were first categorized in groups or clusters (faculties and departments). Thereafter, departments in each of the faculties were identified. The systematic sampling strategy was used to select the final sample for the study. The research instrument that was used for this study is the questionnaire. The questionnaire had two sections – section A and section B. While section A bore the biographic data of the respondents, section B bore the thematic questions. The data generated from this survey were presented in simple frequency tables, as shown in the succeeding section of this paper. Of the 398 questionnaire distributed, 360 copies were completely filled and returned by the respondents. Our subsequent data analysis was based on the 360 copies of questionnaires returned.

Thematic Data Presentation and Analysis

Data relating to the research objectives/questions are presented and subsequently analysed in this section.

Table 1: Artificial Intelligence is the Trending Innovation in the Digital Communication

Options	**Frequency**	**Percentage**
Strongly	187	52%
Agreed	173	48%
Strongly Disagreed	0	0%
Disagreed	0	0%
Total	360	100%

Source: field survey 2024

The implication of the data in the table above is that awareness level of the presence of Artificial Intelligence in the Global Digital Communication World is very high.

Table 2: Various Sectors of The Society are presently using Artificial Intelligence to improve their efficiency and service delivery.

Options	**Frequency**	**Percentage**
Strongly Agreed	104	29%
Agreed	112	31%

Strongly Disagreed	64	19%
Disagreed	76	21%
Total	360	100%

Source: field survey 2024

In table 2 above, the data imply that a significant proportion of the respondents were conversant with the influence of Artificial Intelligence in the society. This is an indication that the respondents may be able to know the extent AI is applied in governance and drug abuse.

Table 3: Artificial Intelligence are presently integrating in governance and drug abuse.

Options	**Frequency**	**Percentage**
Strongly Agreed	112	31%
Agreed	104	29%
Strongly Disagreed	65	18%
Disagreed	79	22%
Total	360	100%

Source: field survey 2024

The implication of the data on the table above is that a significant proportion of the respondents was aware that AI has influence in governance and drug abuse. The data are also an indication that the respondents are compliant with the global digital technology.

Table 4 Artificial Intelligence has the potential to bridge the information gap between the government and the citizens.

Options	**Frequency**	**Percentage**
Strongly Agreed	148	41%
Agreed	162	45%
Strongly Disagreed	22	6%
Disagreed	29	8%
Total	360	100%

Source: field survey 2024

The data in table 4 above imply that the respondents perceive AI as effective technological innovation that can bridge the gap between the government and the citizens, and therefore mitigate against rumors, misinformation, disinformation and malinformation.

Table 5: AI-Driven Applications can facilitate the responsibilities of government on drug law enforcement

Options	**Frequency**	**Percentage**
Strongly Agreed	155	43%
Agreed	86	24%
Strongly Disagreed	47	13%
Disagreed	72	20%
Total	360	100%

Source: field survey 2024

The implication of the data on table 5 above is that AI-driven application has become a veritable strategy improve the campaign against drug above by the government.

Discussion of Findings

Results from this study revealed that Netizens in Anambra state were unanimous in their affirmation that artificial intelligence is being integrated into the art of governance and drug law enforcement. Again, the results revealed that Netizens in Anambra state perceive AI as having the potentials to be used by government to generate feedback from the citizens about government policies, programmes and activities. These views were in tandem with the views of Yigitcanlar, T., Degirmenci, K., and Inkinen, T. (2022), who in their, study found that the public appreciates the benefits of AI in urban services and disaster management. This finding aligns with the technological determinism theory which formed the bedrock of the paper. To that extent, therefore, the finding further revealed that the medium is the message. Our second objective, which sought to find out if AI facilitates the role of government in the campaign against drug abuse, was supported by a significant proportion of the respondents. This aligns with the study by Nsude (2022) which revealed that the media should utilize the power of AI to sufficiently raise awareness about threats of drug abuse and security challenges.

Conclusion

It is unarguable that AI will improve governance and drug abuse. Government officials interact with the public every day to resolve their queries. By replacing these officials, AI chatbots can effectively automate interactions, allowing workers to focus on more complex tasks. They provide a comprehensive knowledge base for citizens with multilingual support and collect citizen feedback on a large scale.

For instance, the US Army recruitment website uses a virtual assistant, SGT STAR, that has so far answered over 10 million public queries. It guides visitors around the website, answers basic questions, and redirects to a human correspondent when needed.

Similarly, the Department of Homeland Security, USA, uses EMMA, a virtual assistant catering to immigration services. EMMA guides around one million applicants per month regarding the various services offered by the department and directs them to relevant pages and resources.

Likewise, the government of Dubai uses an AI assistant RAMMAS that guides citizens regarding bill payment, application tracking, and job applications.

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