



Southern African Journal of Communication and Information Science

Special Issue: Re-imagining Communication and Information Science in the Age of Artificial Intelligence (AI)

Artificial Intelligence in Zimbabwean media: ethical concerns, governance issues, and societal impact (2016-2025)

Israel Mbekezeli Dabengwa, Perseverance Chigamani and Rosemary Maturure

Published Online:

12 December 2025

To cite this article: Dabengwa, I.M., Chigamani, P. and Maturure, R. Artificial Intelligence in Zimbabwean media: ethical concerns, governance issues, and societal impact (2016-2025). *Southern African Journal of Communication and Information Science*. 3 (1): 66-98. DOI: 10.64645/nust.sajcis.3.1.305

Artificial Intelligence in Zimbabwean media: ethical concerns, governance issues, and societal impact (2016-2025)

Israel Mbekezeli Dabengwa

Acting Deputy Librarian

National University of Science and Technology Library, Bulawayo, Zimbabwe

israel.dabengwa@nust.ac.zw

Perseverance Chigamani

Sub-Librarian

Midlands State University, Gweru, Zimbabwe

chigamanip@staff.msu.ac.zw

Rosemary Maturure

University Librarian

Africa University, Mutare, Zimbabwe

rosenyama@yahoo.com

Abstract

Artificial Intelligence (AI) has gained attention in Zimbabwean media, with reports highlighting its applications in healthcare, education, parliament, marketing, and agriculture. This study explores how Zimbabwean media reports AI adoption and usage, focusing on socioeconomic impacts, ethical concerns, and regulatory issues. An analysis of 575 news stories using media classification methods, sensitising codes, and grounded theory revealed key themes through Leximancer and RStudio Bibliometrix. The findings show increased AI coverage from 2023-2024, coinciding with generative AI tools and governance concerns. The media presents utopian views emphasising AI benefits while giving less attention to dystopian concerns such as privacy, bias, and neo-colonialism. The Zimbabwean media emphasises data sovereignty and Ubuntu philosophies in AI development. Dystopian perspectives highlight privacy, bias, access, ethical decision-making, job loss, and neocolonialism issues. The media suggest stakeholder collaboration to address insufficient funding, skills, infrastructure, and connectivity challenges through network expansion, re-skilling, expert consultation, and developing comprehensive AI frameworks aligned with regional policies. This study demonstrates the media's role in raising awareness of AI's benefits and risks of AI and influencing public perception and policy development. Recommendations include an increased coverage of ethical issues and infrastructure upgrades to promote societal readiness. Developing a clear AI framework is essential to govern the adoption of ethical AI in Zimbabwe. This study offers insights to policymakers and researchers in low-resource settings. Future research should explore public AI perception using web scrapping and sentiment analysis, track international AI commitments, and investigate sectoral AI implementations. Amplifying diverse voices and enhancing journalists' training in AI reporting are essential for a balanced, in-depth coverage of ethical and governance issues as AI continues to evolve.

Keywords: Artificial Intelligence; Ethics; Governance; Digital news storytelling; Media analysis; Data journalism, Newspaper; Grounded Theory; Policy development; Zimbabwe

Introduction

Artificial intelligence (AI) is defined as an automated task that usually requires human intelligence, replicating various aspects of human thought and behaviour (Russell and Norvig, 2013). Although national regulations limit the adoption of AI, it has recently gained public attention. In this context, the Zimbabwean media have made strides in science communication to inform the public about AI's potential applications of AI. This paper examines AI, as reported by Zimbabwean newspapers, to understand local conceptualisations and its impact on sectors such as the economy, education, healthcare, and governance. It highlights the benefits and risks of AI adoption and local strategies discussed in the media. Disseminating AI knowledge in lay terms is crucial for public understanding and integration into daily life, as Zimbabwe's experiences offer valuable insights for other low-resource settings.

Zimbabwe offers a compelling case for studying AI readiness and adoption, boasting an Internet and Data subscription penetration of 11.2 million (73.3%), which is indicative of its citizens' engagement with digital tools. Oxford Insights (2023) places Zimbabwe among the top 20 Sub-Saharan African countries in the AI Readiness Index, ranks it #158, and has an average score of 30.71 compared to 30.2 for Sub-Saharan Africa. However, Sub-Saharan Africa's average score lags behind regions such as Latin America, the Caribbean (41.5), and East Asia (51.4). Zimbabwe achieved a score of 3.69 out of 100/ #98 out of 138 countries on the Global Index on the concept of Responsible AI, which assesses the degree of responsibility exhibited by various nations concerning their performance and competencies across 19 thematic areas and three dimensions (Adams *et al.*, 2024). This index ranks Zimbabwe 18th among the 40 countries evaluated in Africa (Adams *et al.*, 2024). Zimbabwe's lowest score is on the Responsible AI Governance dimension, where it scored 0. The same index shows that South Africa has the highest score in Africa with 27.61 out of 100. Chanthalangsy *et al.* (2022) and Chiurunge (2024) note that Zimbabwe has fundamental AI-related policies and laws, but lacks a national AI and e-government strategy. The Southern African Development Community [SADC] (2022) reports that Zimbabwean ministers convened at the UNESCO Southern Africa Sub-regional Forum on Artificial Intelligence to discuss ethical AI usage. The next step involves developing national guidelines and best practices for AI and, perhaps, e-governance based on UNESCO recommendations. Although specific AI laws are absent, existing laws cover data privacy, access to information, consumer protection, and copyright (Chanthalangsy *et al.*, 2022).

The literature reveals no media analysis on AI adoption in Zimbabwe, despite two reports on the state of Zimbabwean media over the past four years (Zirima, 2020; Project for Excellence in Journalism, 2023). The Project for Excellence in Journalism (2023) briefly mentions using AI tools to measure news impact, but does not explore AI content. Ndlovu (2024) examined audience perceptions of a specific AI application (an AI news presenter named Alice) as discussed online and in interviews and did not evaluate the content of the news agency and the ethical issues needed in AI governance. Thus, this study uses data journalism (using vast amounts of complex datasets for storytelling and analysis) to examine the content of news stories in the Zimbabwean media, highlighting how ethical issues in AI are discussed, influencing AI governance among policymakers and the public. The findings of this study are then applicable to other African countries and the Global South, where the media can frame AI-related conceptions and controversies, thus driving public awareness and public dialogue. A similar study covering data from the Global North news stories (2013-2018) may not be

reflective of problems in the Global South, as well as the current advancements in generative artificial intelligence, large language models, and ethical issues concerning AI.

Objectives of the study

The overall objective of this study is to explore how the Zimbabwean media reports the adoption and usage of AI. This study relies on the findings of Brennen et al. (2018), Chuan et al. (2019), and Vergeer (2020) to frame the specific research questions.

Specifically, the following questions were framed.

1. What are the potential uses of AI in Zimbabwe's socioeconomic life?
2. What ethical concerns have been raised by the media in Zimbabwe regarding the implementation of AI in the nation?
3. How can Zimbabwe regulate AI systems to ensure an equitable and fair distribution?
4. What are the challenges in adopting AI in Zimbabwe?
5. What are the solutions to the challenges of AI adoption in Zimbabwe?

Literature review

Previous studies that have looked at how media reports on AI have sought to (1) compare various definitions of AI to understand how it is conceptualised by different journalists, media houses, or countries to observe the balance between dystopian (threats) and utopian (opportunities) views of AI in society, (2.) examining the differences between different social actors' views on AI, such as political views; and (3.) study the frequency of topics and frames in AI (salience). However, there is a dearth of studies examining the content found in newspapers, especially in Africa.

Comparing different AI definitions

Sne (2022) explored historical discourse over 65 years, analysing 253 Danish newspapers and magazines using critical discourse analysis and quantitative content analysis. The study revealed conflicting views on AI imaginaries (public and societal perceptions of AI) and intelligence amplification (IA), where computers enhance rather than replicate human intelligence. Sne (2022) used Danish equivalents for AI terms to search for the Mediestream and Infomedia archives. Discourse analysis followed a three-dimensional framework: (1) intertextual dimensions, (2) discursive practice dimensions, and (3) social practice dimensions. The text dimension categorises AI concepts as positive, negative, or neutral. The intertextual dimension examines media references to AI and IA, often citing science fiction. The social practice dimension assessed how Danish news agencies reported on AI by contrasting computer super-intelligence with human intelligence augmented by computers. Sne (2022) categorises "AI imaginaries" into utopian and dystopian views, potentially shaping public opinion and action on AI.

Studying the frequency of topics and frames (salience)

Vergeer (2020) examined AI topic salience in Dutch newspapers from 2000-2018 using Lexis Nexis data. The study found that AI adoption is perceived positively as an assistive technology or negatively when surpassing human capabilities. Vergeer (2020) categorised media into sensationalist terms, finance, religious orientation, and geospatial focus. Latent Dirichlet Allocation (LDA) modelled news topics and sentiment, finding that Dutch sensationalist news was more negative about AI. Although statistical tests have explored topic relationships, specific texts have not been disclosed.

Various social actor's views on AI

Brennen et al. (2018) examined 760 UK media reports on AI, categorizing outlets as "left-leaning" or "right-leaning." Right-leaning media emphasised economic, security, and investment issues, whereas left-leaning media focused on ethical issues and privacy. Both sides presented sensational views: a "utopian" perspective of AI's efficiency and a "dystopian" view of AI as a threat. Chuan et al. (2019) analysed 2,845 American newspaper stories on AI through random sampling. They found three polarised themes: (1) AI risks and benefits, (2) societal vs. personal impact framing, and (3) thematic (broad societal context) vs. episodic framing (specific examples such as case studies or events).

Reporting on AI ethics in the media

Ouchchy, Coin, and Dubljević (2020) looked at 254 English media reports on AI ethics searched from the NexisUni database (newspapers, magazines, and web blogs), but did not specify the countries they selected (2013 to 2018). They focused on ethical issues, principles of ethical theories, AI ethics, article tone, and specific AI technologies. Media interest in AI ethics grew in 2014. Unlike other tech-AI stories, most news stories are neutral. Key ethical issues focused on bias, privacy, and data protection. The recommendations included ethical rules and public discussion. AI regulations aim to balance the benefits and reduce harm. Content often lacks depth and requires expert inputs. This paper advocates addressing AI's social and ethical issues through public information, expert collaboration, and clear policies, emphasising the role of public opinion and accurate information.

Perspectives of AI from the African data journalism

Guanah et al. (2020) analysed 285 news stories from Nigerian newspapers to assess AI coverage, finding only 64 relevant stories, showing low visibility. Their study omitted media categorisation, topics, and discourse. Brokensha (2020) examined AI reporting in South African media (2018-2020) using framing theory, identifying 73 news stories analysed with Nisbet's (2009, 2016) frames but failed to explain coverage themes. Neither study has addressed African sociocultural nuances, highlighting the need for research to examine this context.

Using the literature as a baseline to examine AI in Zimbabwean media

Studies exploring the ethical issues of AI adoption primarily focus on privacy and security rather than governance and accountability, driven by increased public access to large language models beyond computer science. This research adapted international methodological strategies for Zimbabwe using text mining for topic modelling, classifying AI imaginaries, and analysing media trends. The study ensured validity by incorporating Zimbabwe's cultural context into these adapted methods.

Methods

The next section discusses the methodology used to operationalise this study within the Zimbabwean context.

Searches for news media

The study used accessible news databases, such as *Google News*® [<https://news.google.com/>] and *PressReader*® [<https://www.pressreader.com/>], to collect regional and national news stories on AI in Zimbabwe. These two tools were selected because of their ability to aggregate

news content, such as headlines and news articles from various media sources (See Table 2). Both sources, *Google News* and *PressReader*, were searched for articles every 2 weeks for 14 months (March 2024 – October 2025).

Table 1: Key News Agencies Searched on PressReader

Newspaper	Focus	Frequency	Outreach	Ownership
Chronicle (Zimbabwe)	General news, politics, business	Daily	Regional	Government
NewsDay	General news, politics, business	Daily	National	Private
The Herald (Zimbabwe)	General news, politics, business	Daily	Regional	Government
The Standard (Zimbabwe)	General news, politics, business, investigative journalism	Weekly	National	Private
The Sunday Mail	General news, politics, lifestyle, entertainment	Weekly	Regional	Government
Sunday News (Zimbabwe)	General news, politics, business	Weekly	Regional	Government
The Zimbabwe Independent	Business, finance, economics, investigative journalism	Weekly	National	Private

The *Daily News*[®] (Zimbabwe) and the *Zimbabwean Broadcasting Corporation*[®] (ZBC) news online website (<https://www.zbcnews.co.zw/>) were searched on their specific websites for the general term “artificial intelligence”. No date limits were placed on ZBC news stories, whereas Daily News Zimbabwe’s digital articles were only accessible on 24 March 2022.

Table 2: Key News Agencies Found Outside of PressReader

Newspaper	Focus	Frequency	Outreach	Ownership
CITE	General news, politics, business	Daily	National	Private
Daily News (Zimbabwe)	General news, politics, business	Daily	National	Private
TechZim	Technology, innovation, gadgets	Daily	National	Private
The Zimbabwe Mail	General news, politics, business	Daily	National	Private
ZBC News Online	General news, politics, entertainment	Daily	National	Government

Inclusion and exclusion criteria

Inclusion criteria

1. News stories on AI usage, marketing tools, ethical use, and governance in Zimbabwe.
2. News stories from the Zimbabwean media houses were written by local reporters and writers.
3. Full news stories with headlines, by-lines, and bodies
4. Digital news stories were found on the websites of news agencies, epaper readers, or news aggregators, such as *Google News*® or *PressReader*®.
5. Date limitation to 19 October 2025.
6. English-only stories.

Exclusion criteria

1. Reproduced news stories from other agencies that appeared in the Zimbabwean newspapers.
2. National radio station programs.
3. Blogs or YouTube news video channels

Selection of the news articles

In total, 575 news stories were retrieved from news agencies. The MaxQDA® web capture tool (a qualitative data analysis software package that can be used to code, analyse, and visualise textual data) was used to download selected news stories online.

Data analysis

Data analysis involved media classification methods, sensitising codes, and grounded theory. Leximancer® and Bibliometrix® were used to systematically identify and visualise the main themes in the news stories, providing insights into the prevailing AI narratives in the Zimbabwean media.

Coding the news stories

Open codes were applied to unique concepts outside sensitising concepts. Memos, analytical notes explaining code properties, are essential (Saldaña, 2021). Two researchers [RM and PC] developed codes through initial reading and code exchange to identify flaws. An arbitrator [ID] resolves disputes and suggests new codes. The study compared the varying definitions of AI, frequency of topics and frames (salience), ethical issues, principles from ethical theories, AI ethics, and specific AI technologies, AI risks and benefits (utopian vs. dystopian), societal vs. personal impact framing, and thematic (broad societal context) vs. episodic framing (specific examples such as case studies or events). The tone of the news stories was not analysed.

Characteristics of selected news stories

Figure 1 shows that the earliest news articles on AI ethical issues in Zimbabwe were published in 2023. Most articles were from *Zimbabwe Independent* and *Herald*. Figure 2, which uses visualisation from Bibliometrix, confirms the Lotkas Law, which states that the majority of news stories are written by very few, often prolific people.

Sensitising concepts

This study employed RStudio Bibliometrix to identify sensitising concepts for consideration prior to the analysis (see Figure 3) (van Eck and Waltman, 2023). A sensitising concept acts as a guide for researchers, indicating what to observe and how to analyse the data (Bowen, 2006). Here, sensitising concepts serve as a dictionary that interprets empirically derived concepts to recognise theoretically significant phenomena (Cipriani, 1990). Once identified, grounded theory, incorporating these sensitising concepts, was applied to the datasets.

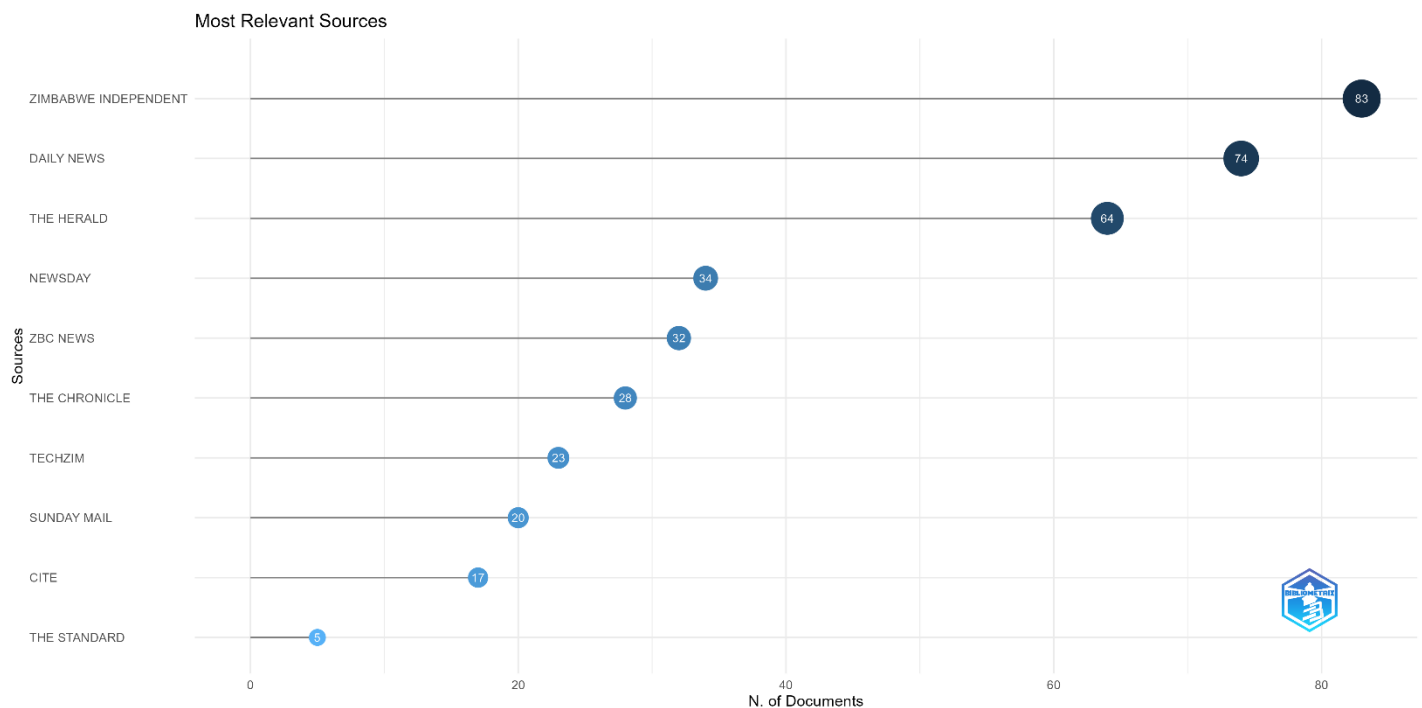


Figure 1: Frequency of the stories in the top 10 newspapers

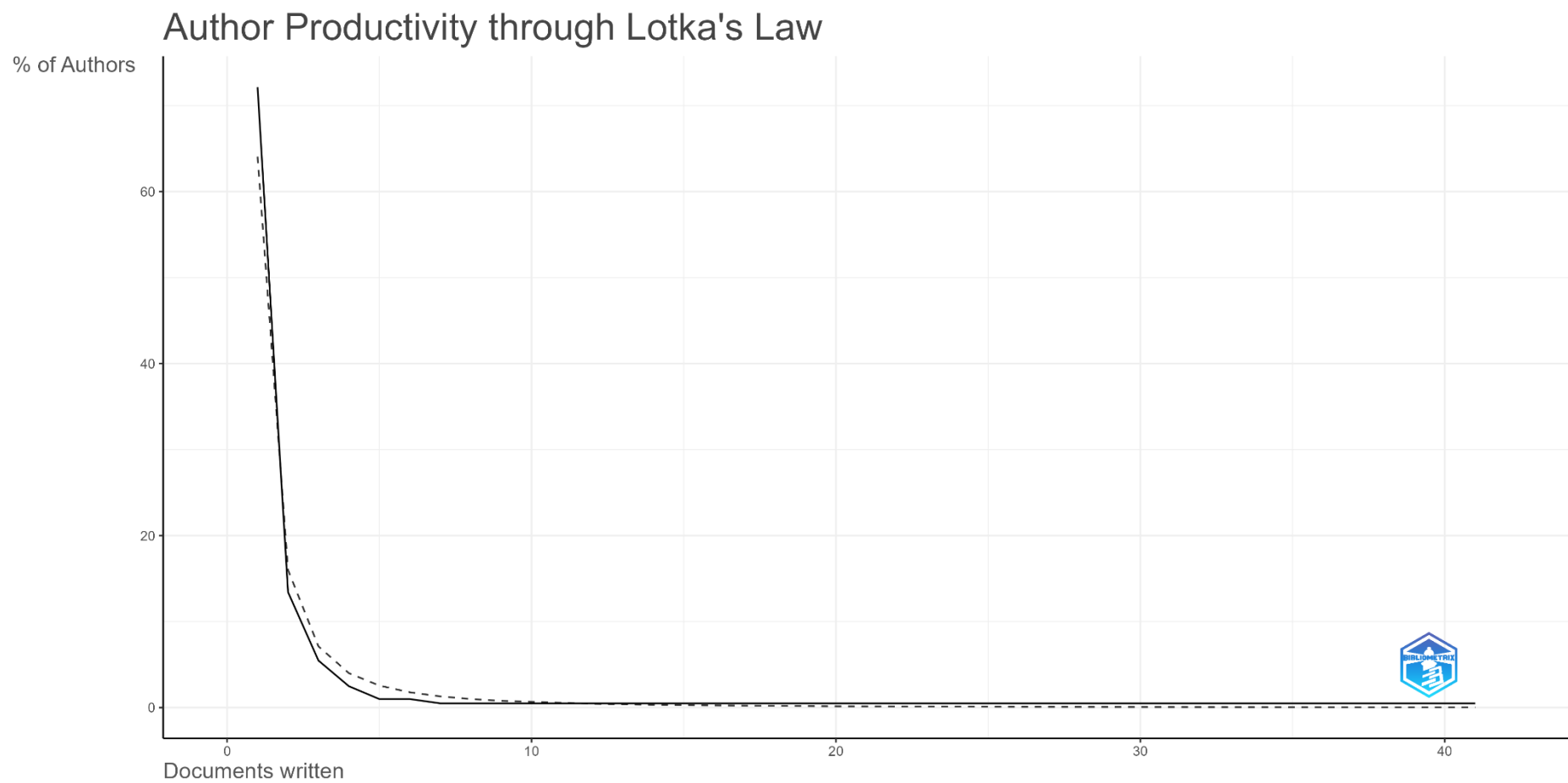


Figure 2: Lotkas Law of Productivity on the Zimbabwean News Stories

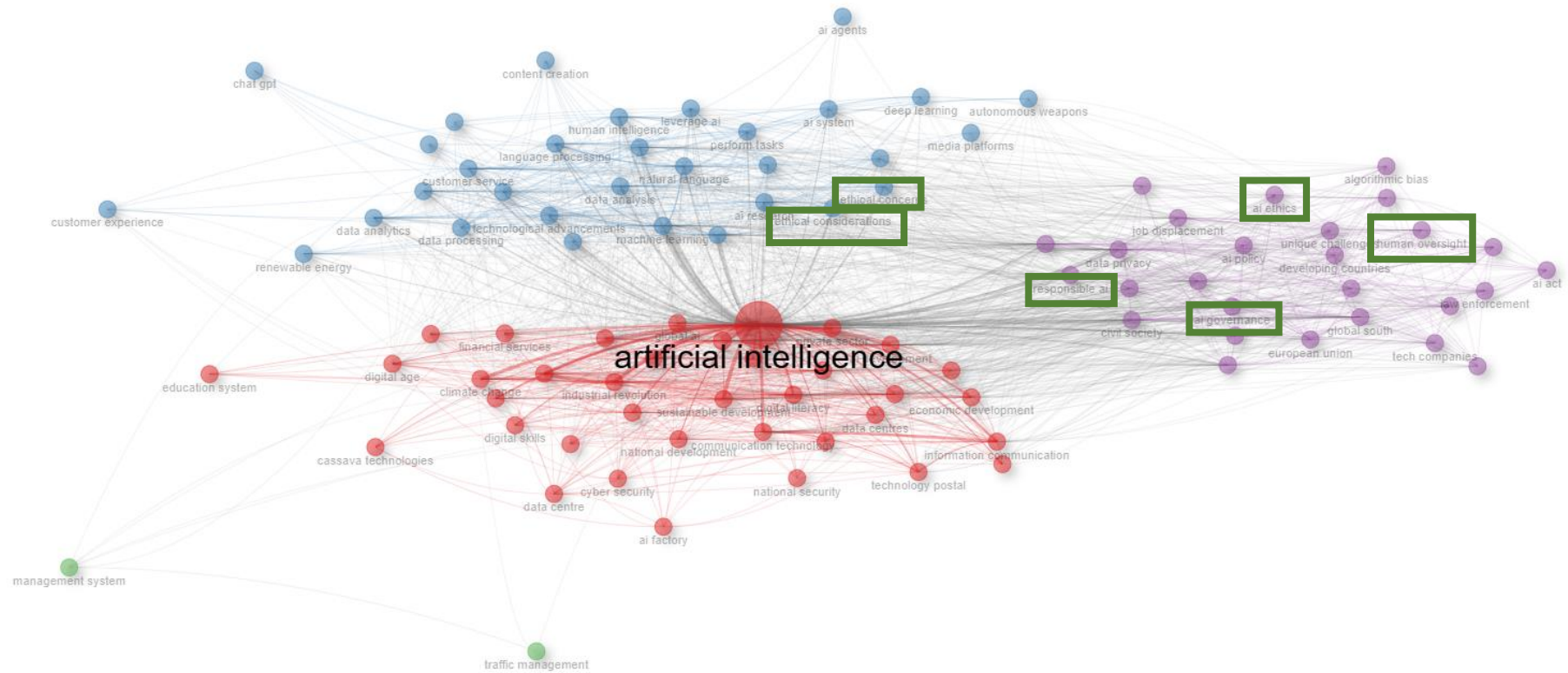


Figure 3: A bigrams co-occurrence map to explore of the themes found in the newspapers [Study findings]

Concept analysis

Leximancer TopicGuide, a text-modelling tool that visualises structured information in newspaper articles using latent modelling, was employed to identify the themes (Smith and Humphreys, 2006). This technique, known as small-world network, illustrates the connections between node pairs (Smith and Humphreys, 2006). Leximancer provides a robust method for extracting meaning from data and is verified through textual data analysis from each node. The process starts with a seed word linking it to related concepts and words, which are then grouped into interconnected clusters based on their co-occurrence networks (See Figure 4).

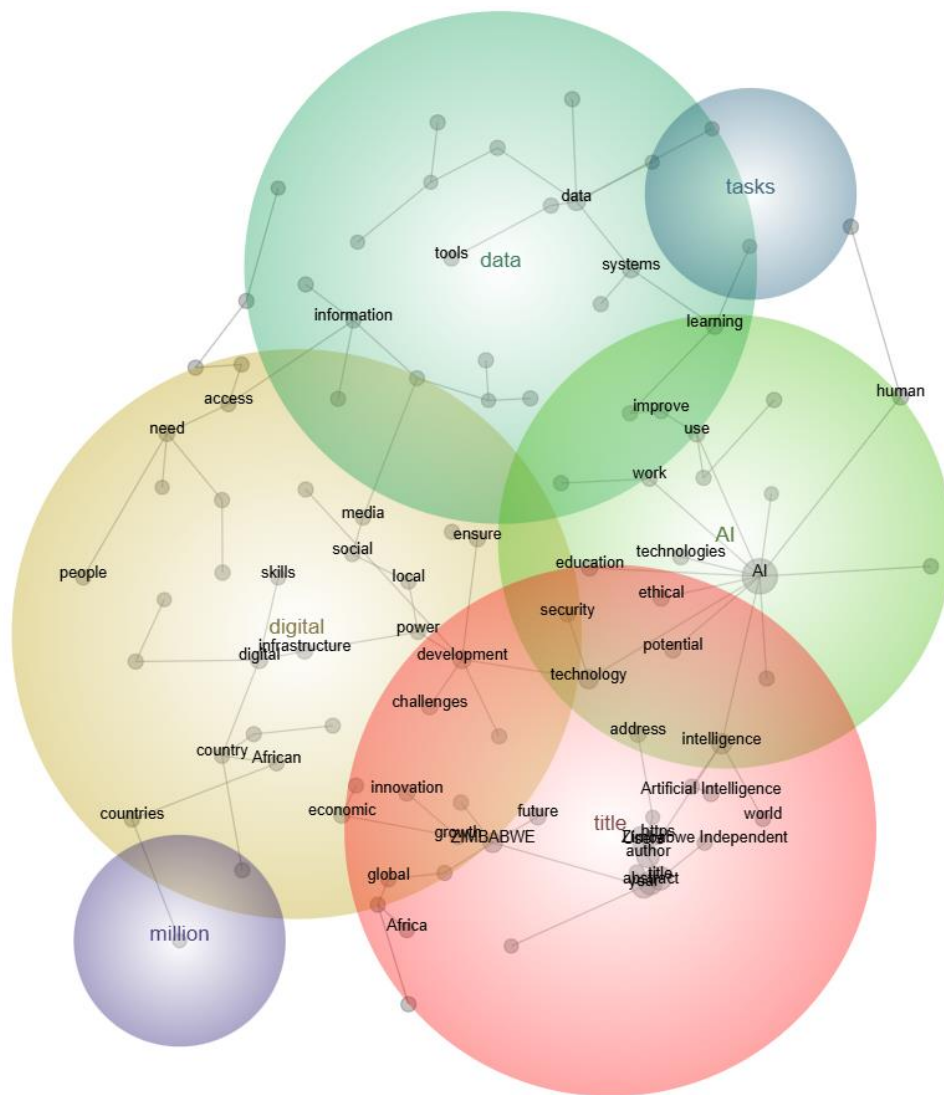


Figure 4: A concept analysis of the themes emerging from the study using Leximancer [Study findings]

Thematic analysis

Thematic analysis was used to gather interpretations of the news stories. The codes were then categorised, and the relationships between the codes were examined more closely until no further categories were suggested (e.g. theoretical saturation). The news stories were also analysed for the “voice” as to “who” of the writer and not those being reported, perspective/viewpoint and polyphony (blending the voices and the views) (Głaz and Trofymczuk, 2020). The comprehensive search and rigorous content analysis methodology

enabled the identification of key themes in the media coverage of AI, as detailed in the Results section.

Results of the study

The following sections report the results of the study based on the above methods and literature.

Media coverage of AI ethics in journalism

News stories on AI ethics in journalism cover misinformation, data bias, transparency, journalistic integrity, authorship, copyright concerns, and the need to train journalists in how to use AI. CITE, a Bulawayo-based digital media organisation, introduced the first Zimbabwean AI presenter called “Alice” for daily news bulletins, as reported by Bangure (2025). The authors’ profiles show a high presence of freelance writers with expertise beyond journalism (some are even tech experts or government ministers), reflecting public participation in the AI discourse.

Definitions of AI

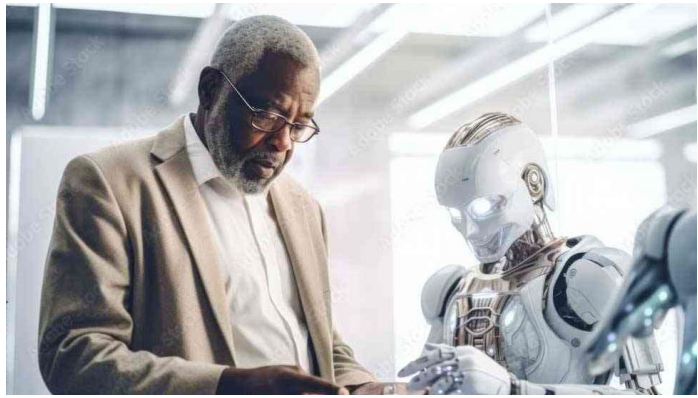
Most reports describe AI as an enhancement of human intelligence (IA). However, few studies have highlighted AI as mimicking human intelligence or qualities (anthropomorphism) or compared human and machine intelligence. However, there is also a misconception that AI that has “anthropomorphic” features hence should show human emotions. Occasionally, reporters omit defining AI and focus on its applications (Ncube, 2023). Examples of the news stories are listed in Table 3. When AI is presented in pictures as anthropomorphism, it tends to be represented by female names or a character with female features. Examples include the AI presenter “Alice” from CITE, “Sophia”, the robot, chatbots such as Econet’s “Yamurai” and “Thembie”, Steward Banks “Batsi”, FBC’s “Chido”, and Nyaradzo’s “Sahwi”. Sagomba (2025c) warns that the usage of female characters in anthropomorphism can be termed the “sexualisation of AI technologies” and there is another potential danger when people put a consciousness into the character. IA is shown using images where males interact with robot-like characters, often providing some form of assistance. Technical definitions are accompanied by pictures of the microchips or circuit boards.

Utopian vs dystopian views

Only 12.1% of these news stories look into ethical issues on AI usage and governance, such as AI ethics and governance, including bias, privacy, transparency, accountability, regulation, policy frameworks, responsible use, human rights, control, and ethical implications in specific sectors such as journalism, policing, and anti-corruption (See Figure 3).

Some articles summed up both dystopian and utopian themes as a “double-edged sword”, having “threats” or “dangers” and “benefits” (Bangure, 2024c; Sagomba, 2025e; Writer, 2025). The threats and dangers are the downsides of AI if not thoughtfully rolled out. Figure 7 shows that the news stories have more utopian views (development and potential = 925 relevant words) than dystopian views (challenges = 289 relevant words). However, the utopian and dystopian views of AI are mostly reported theoretically, rather than with actual examples of lived experiences. The following sections elaborate on these utopian and dystopian views more closely.

Table 3: Examples of definitions of AI and their classification

Type of AI definition	Frequency	Example of AI definitions	Sample picture used in the news stories
Intelligence amplification (human centred AI collaboration to boost productivity)	15	<i>“A doctor can use AI to analyse medical images and identify potential health issues. But it is the human doctor who makes the diagnosis, develops the treatment plan, and provides emotional support to patients. The key to understanding AI's role is recognising it as a tool, not a replacement for human intelligence, which we can aptly term Real Intelligence (RI).”</i> (Kahari, 2025b)	 (Kahari, 2025b)
Technical definitions	7	<i>“The starting point is to understand the basic definitions of key concepts such as Robotics, AI, Machine Learning, Deep Learning, Single-Task AI, Artificial General Intelligence (AGI), Strong AI, and Generative AI (e.g. ChatGPT and Google Bard). Artificial Intelligence refers to intelligence programmed into and demonstrated by machines.”</i> (Mutambara, 2023) – a robotics professor.	 (Kahari, 2025a)

Comparing human and machine intelligence or reasoning processes	5	<i>“In computer science, AI, sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans”</i> (Beaven, 2024)	 (Bangure, 2024g)
Anthropomorphism (seeing AI as having human-like attributes that are physical or emotional)	3	<i>“AI is generally defined as the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.”</i> - (Bhebehe, 2023).	 Sophia (a humanoid robot that visited Zimbabwe) (Staff Reporter, 2024)

AI agents	1	<i>Unlike traditional AI, which primarily analyses data or generates content, agentic AI introduces a new level of autonomy. These intelligent agents are designed to perceive their environment, make decisions, and take actions independently to achieve specific goals (Muchetu, 2024)</i>	 (Bangure, 2025a)
Misconceptions/myths	5	<i>“Audiences would accuse Alice of not showing emotions when reading news or that she struggles to pronounce vernacular surnames such as Ncube.” (Ncube, 2023)</i>	 Alice (an AI news bulletin presenter with an Zimbabwean accent) (Bangure, 2025b)

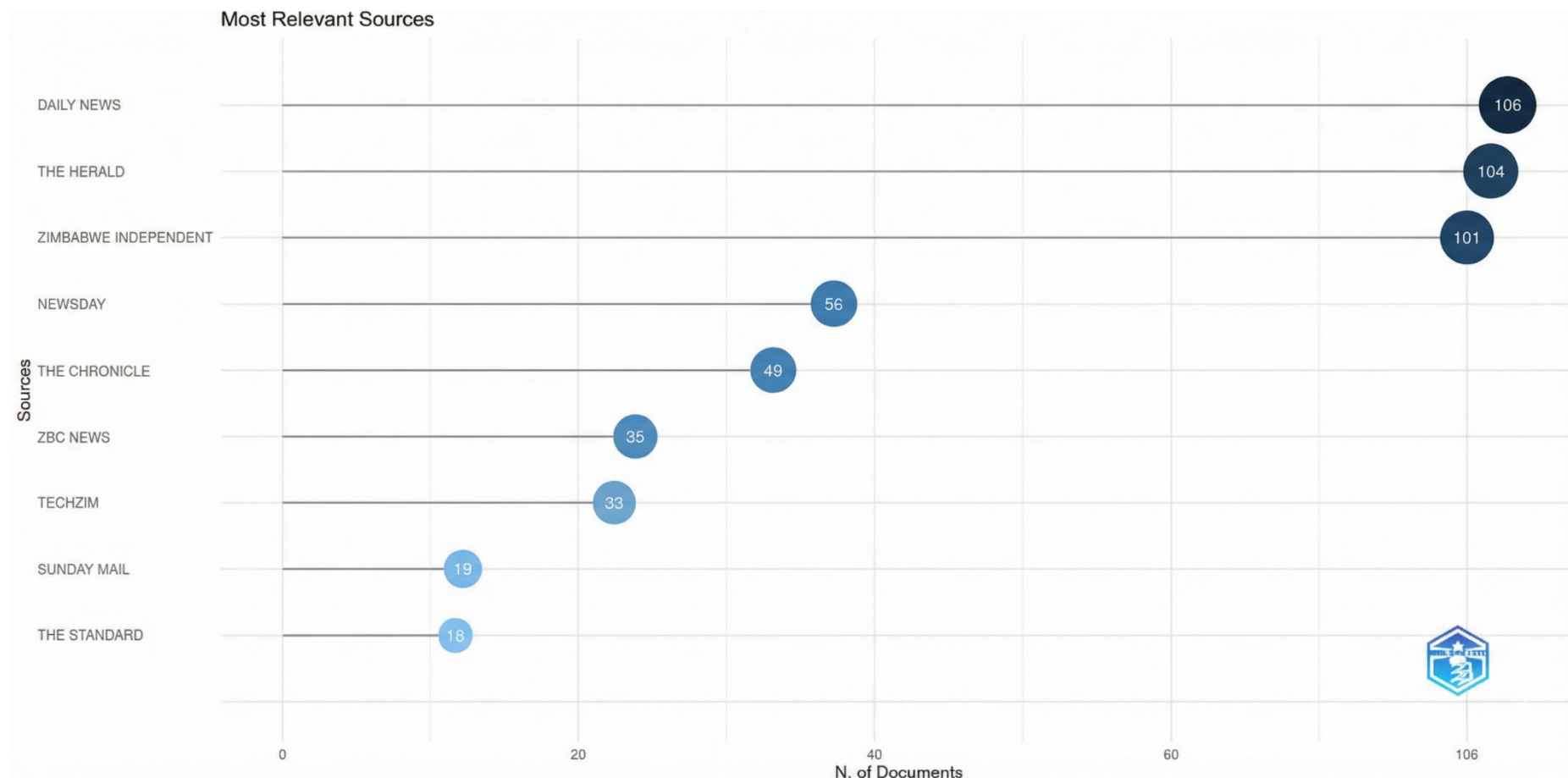


Figure 7: The most relevant words found in the dataset

Utopian views on the applications of AI in Zimbabwean society

Artificial Intelligence is poised to permeate various sectors of Zimbabwe. AI and machine learning are expected to be integrated into numerous industries and software packages, becoming a daily necessity by 2021 (Staff Reporter, 2019). Professor Arthur Mutambara, a robotics expert, emphasised that AI should address local issues rather than adopt Western technologies, which could lead to job losses as they cater to foreign problems (Chikomo, 2023). The primary societal applications of AI include smart policing, safe cities, parliamentary processes, healthcare management, education, and agriculture, each with its own ethical considerations. One news story predicted that AI agents would become a buzzword by 2025 and would be applied in all sectors (Bangure, 2024e).

Table 4: Utopian views found on the news stories [Study findings]

Application of AI in society	Description
Smart policing and safe cities	Urban crime management and traffic monitoring in Bulawayo and Harare can be improved using surveillance cameras and smart technologies, e.g., Dhliwayo (2025).
Parliamentary processes	The balance of AI and human roles in legal analysis and decisions, not relying on either alone, e.g., Mabhachi and Sibanda (2025).
Healthcare management	Raising awareness of AI applications for aiding diagnosis, drug discovery, and personalised medicine, e.g., <i>hearX</i> and <i>Babyl</i> . Other applications: <i>NetOne</i> , a state-owned entity, taking the lead in implementing mobile health information services in rural areas
Education	AI enables personalized learning through real-time feedback and shifts educational focus toward evaluating AI application in tasks, e.g., Staff Writer (2025).
Agriculture	Urging local farmers to embrace AI for sustainable agriculture. Other applications of AI in agriculture include predicting accurate weather patterns.
All sectors	AI agents making faster autonomous decisions. (Bangure, 2024e)

Dystopian views on the application of AI in Zimbabwean society

The most prominent dystopian views in these stories include privacy, algorithmic bias and unfairness, the digital divide, ethical decision making, data sovereignty, academic integrity, and neo-colonialism. Zimbabwe Independent (a private media house) appears to be the most comprehensive source among those listed on dystopian themes. What stands out is that both *The Herald* and *TechZim* focus more on digital imperialism and data colonialism than other studies (See Table 5). The following sections discuss how each of these topics is illustrated in Zimbabwean Digital news.

Table 5: Frequency of dystopian themes found in Zimbabwean newspapers

	Frequency of dystopian themes							
	1	2	3	4	5	6	7	8
Zimbabwe Independent	4	5	1	1	4	2	2	5
The Herald	2	4	3	3	0	0	0	3

NewsDay	2	1	2	1	3	1	0	1
TechZim	0	1	0	1	3	0	0	3
The Chronicle	0	0	0	2	0	0	0	0
The Sunday Mail	1	0	0	1	0	1	0	0
Daily News	1	0	0	0	2	2	0	3
Global Voices	0	2	2	1	0	0	0	0
ZBC News	0	0	0	0	0	0	0	1
The Standard	0	0	0	0	0	0	0	0
The Zimbabwean	0	0	0	0	0	0	0	0

Key:

1. AI Bias & Inequality.
2. Surveillance and Privacy.
3. Misinformation, Information & Manipulation.
4. Digital Imperialism & Data Colonialism.
5. Job Displacement & Impact on Employment.
6. Overreliance on and Loss of Human Skills.
7. Loss of Control.
8. Other Risks (Cyber, Energy).

Privacy and data security

AI's use of sensitive personal and environmental data by AI raises privacy concerns, leading to deceptive deep fakes and digital replicas (Mushohwe and Kakudie, 2024). This covers AI surveillance, data mining, and misuse of personal data by governments and corporations, including facial recognition technology. Bangure (2024c) highlights deep fakes that mimic President Biden's voice and provoke legal action. AI can misuse student data and academic records in education (Ndoro-Mukombachoto, 2024). Irresponsible AI use in healthcare risks patient privacy breaches (Chipungu-Chimbga, 2024). Smart city projects collecting surveillance footage without consent raise further privacy concerns (Bangure, 2024b).

Inequity and bias

Bias is a significant ethical issue in AI. If AI models are trained on biased or limited data, the AI can learn and amplify those biases (this is known as the echo chamber effect). These news stories highlight the importance of ensuring that AI systems do not perpetuate existing societal biases and inequities (Sibanda, 2025). Concerns have been raised regarding the cultural insensitivity of AI algorithms and the need for transparency in their development (Sagomba, 2025b). Three types of bias were identified: data, design, and cultural bias, which can be explained as follows:

1. **Data Bias:** AI systems trained on biased data will learn and reflect those biases. (e.g. facial recognition struggles with a darker skin tone) (Chimhangwa, 2020; Chirenje, 2024).
2. **Design Bias:** If AI systems are not designed inclusively, they can discriminate against specific demographics. (e.g., gender bias against women in loan approvals) (Chirenje, 2024)
3. **Cultural Bias:** AI systems developed in one cultural context may not function well in other contexts. (e.g. AI is insensitive to Zimbabwe's cultural heritage) (Mutangadura 2024). Other examples include misdiagnoses in African healthcare (TechZim 2023).

Equity and access

This study addresses the digital divide and potential for AI-driven solutions to worsen existing educational and social inequalities due to limited ICT access in rural and economically disadvantaged regions. It is essential to ensure equal access to the benefits of AI-driven solutions for all the societal groups.

Ethical decision-making

AI's capacity to make decisions with moral and ethical consequences is a concern (Bangure, 2024a). Employing AI in decision-making processes raises ethical and accountability concerns. Examples are given, such as using AI in healthcare organisations where accountability for some decisions could be problematic (TechZim, 2023; Bangure, 2024a). Another example is a company that appointed a robot (AI agent) as a CEO, raising issues regarding the ethical implications of non-human entities making major business decisions (Staff Reporter 2023).

Misinformation and disinformation

This theme examines AI's role of AI in spreading misinformation and disrupting democratic processes. It explores how AI reinforces biases and creates echo chambers, focusing on deepfakes, propaganda botnets, and the impact of social media algorithms on political polarisation (Mugadzaweta, 2024).

Academic integrity

There is deep concern that the use of AI in the education system can lead to academic dishonesty and untrained professionals entering the job market (Bulla-Musakwa, 2024). There has been a call for students to develop skills that AI cannot replicate and rethink educational approaches in light of AI (Sibanda, 2025).

Job losses and displacements

There are concerns that AI will replace or displace jobs, particularly repetitive ones (Chipungu-Chimbga, 2023; Ntaka, 2023; Sengere, 2024; Tutani, 2024). This is troubling given Zimbabwe's high unemployment rate (Chipungu-Chimbga 2023). However, some jobs may be

modified rather than eliminated (Sengere, 2024). Dr. James Manyika, Senior VP of *Research, Technology, and Society* at Google, highlighted that in 1995, web designer roles did not exist because the Internet was not yet fully developed. Therefore, it is crucial to encourage companies to adopt technologies constructively rather than merely replacing jobs.

Neo-colonisation

Four news stories predict AI's role of AI in Zimbabwe and Africa's neo-colonisation (Ntaka, 2023, 2024; Bangure, 2024d; Makura and Mugonde, 2024), critiquing Western-centric AI agendas from a decolonial viewpoint; these news stories are reported in state-owned media houses. Ntaka (2023) described decolonial AI as integrating indigenous knowledge to promote social justice, cultural preservation, and sustainability. Ntaka (2023, 2024a) cautions against Western agendas exacerbating the marginalisation and discrimination of minorities, advocating for AI development and governance that is critical, inclusive, and respects human rights and diversity.

In addition, frameworks such as *the Beijing AI Principles*, *the Governance Principles for a New Generation of AI*, *the National Standardisation System for AI*, and *Canada's Directive on Automated Decision-Making* are referred to as examples of AI decolonisation (Ntaka, 2023; Bangure, 2024d).

Governance of AI

The Government of Zimbabwe (GoZ) launched its national artificial intelligence framework in 2025, a key step in navigating the AI revolution by balancing innovation with responsibility (Admin, 2025). The framework is built on these 5 pillars:

1. **Zimbabwe Artificial Grants Challenge:** A national competition to spur AI innovation and find solutions to pressing national challenges.
2. **National Artificial Intelligence and Data Platform (Project Pangolin):** A centralized, secure platform that will provide researchers and innovators with access to anonymized data and computational resources. The name "Pangolin" is a uniquely African touch.
3. **Nzwisiso National Literacy Campaign:** A public awareness campaign to educate citizens about the benefits and risks of artificial intelligence.
4. **National Artificial Intelligence Regulatory Sandbox (The Innovation Crucible):** A safe, controlled environment where startups and researchers can test new AI products and projects without the usual regulatory constraints.
5. Establishment of Oversight Bodies:
 - a. A National Digital Regulatory Committee under POTRAZ (Postal and Telecommunications Regulatory Authority of Zimbabwe). (High impact on copyright)
 - b. An Artificial Intelligence Strategy Implementation Office within the Ministry of ICT.

This framework builds on significant strides to regulate AI usage and the telecommunications industry (Josphat, 2024) and may include the adoption of the UNESCO Recommendation on the Ethics of Artificial Intelligence (January 2025). It features a collection of prebuilt libraries and tools to simplify developing and deploying AI algorithms while ensuring consistency across projects (Muswere, 2025). However, specific timelines or milestones for a national policy's rollout have not been established. To effectively implement such frameworks, "agile governance" in parliamentary processes is proposed as a key tenet. The National Assembly Speaker suggested using real-time data analysis to align governance with dynamic societies (Writer, 2023), highlighting AI's transformative role in parliaments.

Intellectual Property Rights in the context of AI

Langa (2025) raises questions on who owns Intellectual Property, when AI has been used. Is the AI? The person who prompted them to build the AI. These questions came after a local musician, known as Winky D, released the first AI music video of a song that he wrote and recorded (See Figure 7). Langa (2025) also worries that AI videos may potentially lead to job displacements and cultural interference. Therefore, he suggested that the AI framework/policy should also cover creative arts. One journalist suggested the need for a local AI-focused patent office to address these concerns (Mushoriwa, 2024).



Figure 7: A picture from the AI created video “Fake Love” by Winky D

Ubuntu philosophy

AI algorithms from African countries have been suggested to embody the philosophy of Ubuntu to embody local cultures and values, which emphasises core values as empathy, community, inclusivity, interconnectedness, shared responsibility and a “heritage based identity” (Makura and Mugonde, 2024; Muchetu, 2024). This philosophy aims to reduce data ownership and governance, particularly concerning AI usage from the Global North (Makura and Mugonde, 2024).

Public awareness and education

AI can enhance productivity across Zimbabwe's sectors, but requires preparation for effective adoption through public awareness, workforce upskilling, and infrastructure development. Public education on AI's impacts and democratic policymaking is essential, as AI education will prepare students for future needs.

Local AI events

Media coverage of local AI events is limited, with 31 events reported during 2016-2025. The first was the 2017 PyCon Conference, focusing on AI and Python skills for youth (Madamombe, 2017). No events were reported in 2018, 2020-2022. Coverage improved from 2023-2025, peaking in 2024.

Table 6: Frequency of reporting AI stories in the Zimbabwean Media

Year	Frequency of reporting
2016	0
2017	1
2018	0
2019	1
2020-2022	0
2023	7
2024	14
2025	8

Parliamentary committee

The Zimbabwean Speaker proposed a "Committee of the Future (AI and ICT)" in December 2023 to guide AI use (Staff Reporter, 2023), following TechZim's recommendation (Sengere, 2023b). The committee visited Latvia, Sweden, and Finland to study AI applications in parliaments (ZBC News Reporter, 2024a; Murwira, 2024). The Parliament will implement guidelines for accountability and privacy (Chikandiwa, 2023), while Zimbabwe will develop a legal framework for ethical AI use (Staff Reporter, 2023).

Dedicated AI ministry

An article titled "*Tech Revolution: Canvassing for Ministry of AI in Zim*" which appeared in *Zimbabwe Independent*, suggests that the country needs a dedicated ministry that will bring oversight of AI (Moyo, 2024). Analysts suggest that AI ethics are broad and cannot adequately fit the Ministry of ICTs (Moyo, 2024). Techno experts are also making suggestions for an AI Regulatory Framework that will create a Zimbabwe Artificial Intelligence Regulatory Authority (ZAIRA) to oversee AI (Sagomba, 2025d).

Partnerships

Collaboration among policymakers, industry leaders, ethicists, AI interest groups, civil society, technology experts and international partners, persons with special needs, and researchers is essential for leveraging AI benefits to balance national security needs with individual rights and freedom (Bangure, 2024b).

Localising AI frameworks

The European Parliament's AI Act aims to regulate AI development within the EU (Bangure, 2024b). China and Canada have established AI governance principles (Bangure, 2024c). A robotics professor urged Zimbabwe to work with the AU and SADC on unified AI regulations (Sengere, 2024). Zimbabwe's laws remain outdated for 4IR technologies (Chikomo, 2023). The professor proposed regional AI frameworks to regulate AI and foster partnerships (Chikomo 2023; Mutambara 2024). Frameworks should reflect national values to build trust (Decolonial AI) (Ntaka, 2024a). The media have not reported progress in harmonising efforts with regional or global frameworks. GoZ introduced the ICT Policy, Smart Zimbabwe 2030, and the National Broadband Plan (Ndlovu, 2024; Chitumba and Mupanedemo, 2024). Current frameworks such

as the AU's Cyber Security Convention 2014, Data Protection Act 2021, and ICT Policy 2016 inadequately govern AI (Moyo, 2024).

Participation of Africans in global AI governance

This article emphasises the involvement of African communities in AI system design and respecting national sovereignty. It recommends that African nations develop regulatory frameworks and collaborate with the Global South regarding AI governance. The African Union's AI strategy includes industry codes, standards, and national AI councils (Ntaka, 2023; Bangure, 2024d).

Higher education quality assurance committee

The *Zimbabwe Council of Higher Education* (ZIMCHE), a regulatory board in higher education, has outlined a multitiered escalation process within the university system, ending at the Council, comprising noted scholars from various universities (Bulla-Musakwa, 2024). This process provides an overview of the academic integrity of Zimbabwean universities (Bulla-Musakwa, 2024).

AI governance in the health sector

TechZim (2023) suggested the *World Health Organization's* six core principles for AI governance in health as a framework for responsible integration of AI for healthcare in Africa.

Including persons living with disabilities

As AI innovations have the potential to perpetuate or cause existing social inequalities such as disabilities, it is important to include this vulnerable group in the development and deployment of AI (Tigere, 2023; Nyawo, 2024). People with disabilities can provide valuable insights into the development of assistive technologies driven by AI.

Ensuring data sovereignty

There is a positive drive for data sovereignty, as the country is working towards upgrading telecommunications infrastructure, such as data centres (Lupande and Zhakata, 2022; Muponde, 2023). These technological upgrades are needed to develop local AI innovations and to fully participate in 4IR.

Prioritising AI research and development

Zimbabwe should fund Research and Development to enable efficient AI adoption using the necessary infrastructure. Investments should focus on ethical AI solutions, including bias detection, privacy protection, and ethical decision-making integration (Bangure, 2024f). This research ecosystem can help Zimbabwe to address challenges and become a global AI leader (Bangure 2024d).

Challenges of adopting AI in Zimbabwe

Zimbabwe adopted AI later than other countries, initially accessing ChatGPT through VPNs and foreign numbers owing to regulations (Sengere, 2023a). This led to alternatives such as ZivAI and DanAI, although these lack funding and often relocate elsewhere (Duruson, 2023).

According to TechZim, Zimbabwe remains unprepared for AI integration (Sengere, 2023c). Most Zimbabweans face barriers, including limited device access, unreliable power, and high broadband costs, despite the 91.9% mobile penetration. The country's 65.2% Internet penetration and insufficient 5G infrastructure further hinders its adoption (Sengere, 2023c). In addition, Sangomba (2025a) observed that only 5% of Africa's AI builders have access to the

necessary computational tools for research and innovation. However, there are missed opportunities, such as Cassava Technologies (a United Kingdom tech company) reluctance to build an AI factory in Zimbabwe (Nkomo, 2025).

Solving some of these challenges to create a sustainable national AI ecosystem

At the national level, there is a need for robust digital infrastructure. Network providers such as Econet are reported to be enhancing base stations (Staff Writer, 2023a; Staff Writer, 2022), whereas TelOne upgrades data centres for data sovereignty and rural information access (Muvundusi, 2022; Vinga, 2022). NetOne plans infrastructure development in a newly planned smart city (Reporter, 2024). These initiatives are set to lead to better access to cloud computing services, cybersecurity, modern telecommunications, the Internet of Things, and the Internet ecosystem.

Tech experts have suggested that the GoZ and private sector should invest in high-performance computers (HPC), particularly Graphical Processing Units (GPUs), and even more specialised AI chips for training AI models to fully utilise the benefits of AI (Mutambara, 2024).

GoZ is reskilling and upskilling the workforce in AI and data science, supporting the workforce by changing digital marketing and design thinking to reduce brain drain (Muronzereyi, 2024; Ncube, 2024).

Data voids in the news stories

Data voids represent areas with limited detailed information in news stories, where reporting lacks specificity or indicates an information deficiency (Flores-Saviaga *et al.*, 2022). While sources discuss AI's potential of AI in healthcare, education, finance, and media, they rarely provide detailed usage data or case studies. Media coverage lacks information about AI implementation in supply chains, circular economy, user experiences, and ethical concerns. News stories primarily feature journalists, government officials, and academics with minimal public input.

Discussion

Media ownership and its impact on AI reporting

Since 2016, journalists from private and state-owned media in Zimbabwe have reported on AI through outlets such as the Chronicle, Herald, Sunday Mail, and Independent. Private media, with greater editorial independence, was the first to cover AI and produce more stories on the subject than state-owned media.

Trends in the media's reporting of AI

AI entered the mainstream media of Zimbabwe in 2016 which is within the timeline of the spike in news stories in a study conducted by Ouchchy *et al.* (2020). AI has recently gained widespread attention in Zimbabwean media. The surge in AI coverage during 2023-2024 coincides with the rise of generative AI tools such as ChatGPT and concerns over AI governance. However, there is a significant gap in the reporting of AI ethics and governance issues across media. This may suggest that AI's potential applications are frequently reported (utopian framing), whereas guardrails (ethical and governance framing) receive less attention. This finding is consistent with that of a previous study conducted by Ouchchy *et al.* (2020), who observed that media reports of AI ethics are shallow in their content which is a data void.

Authorship of the articles

Most AI news stories have been authored by freelance writers. This trend is related to an increase in local freelance journalists in science communication after staff writer layoffs (Tshuma *et al.*, 2024) and limited AI-knowledgeable journalists. Unlike traditional media articles by individual journalists, these stories are often co-authored, where scholars publish their findings together.

Media conceptions of AI

The prevailing definition of artificial intelligence (AI) predominantly aligns with the concept of Intelligence Amplification (IA), alongside technical definitions articulated by freelance technology experts. Instances of anthropomorphism are relatively rare and some misconceptions are present. These findings are consistent with those reported by Dabengwa *et al.* (2025), where IA, technical definitions, and anthropomorphism were prevalent in discussions with students and academics in Zimbabwean higher education institutions. This body of evidence suggests that Zimbabweans exhibit a preference for IA, possibly because of apprehensions about granting AI full control over various aspects of human life, as they prioritise human accountability.

An unexpected sub-theme emerged in the analysis of artificial intelligence (AI), characterised by its definition and representation through gendered perspectives. For instance, AI was depicted through the interactions of male characters with robotic images, whereas anthropomorphism was represented by female characters or the use of female names for AI chatbots. One opinion piece expressed concern regarding the typical risks associated with the sexualisation of AI (Sagomba, 2025c). This finding was not present in the primary author's study in higher education institutions (HEIs) (Dabengwa *et al.*, 2025). West, Kraut, and Chew (2019) observed an increase in digital assistants that are predominantly female, as users prefer characters such as young, attractive women. However, they noted that this can reinforce undesirable cultural stereotypes, particularly when these tools make errors via female voices or images, leading to an erosion of trust in human women. Additionally, female characters might be selected because of gendered stereotypes that portray women as helpful, obedient, and servile. Another potential danger is placing a human consciousness into AI assistants – this depicted in the Ndlovu (2024) study of Alice the news reading assistant – wherein some of the audience thought she is a “real” human and paid attention to her visual presentation. Ndlovu (2024) also found that some expected her to experience human-like emotions. Returning back to West, Kraut, and Chew (2019), they share that AI blurs lines on how AI is defined, how it works, and what it actually could be a deliberate agenda to hide what AI could become and at times represents science fiction representations. People want AI to have human-like qualities to increase its potential benefits, but there is a concern that AI should never pretend to be human.

Utopian vs dystopian views of AI usage

This is a prominent framing in the datasets. This study explicitly analysed AI imaginaries, categorising them into utopian (opportunities/benefits) and dystopian (threats/risks) views. In the Zimbabwean media, AI is often described as a “double-edged sword”, recognising both its advantages and potential dangers. This dual perspective is crucial, as it underscores the complexities associated with the implementation of AI. By analysing this perspective, we can grasp both dystopian narratives (threats/risks) and dominant narratives (utopianism/benefits).

AI is expected to transform sectors such as education, healthcare, banking, agriculture, policing, and parliament in Zimbabwe. Reporters envision AI-enhancing processes, improving productivity, aiding diagnostics, analysing issues, and strengthening food security. These views align with Danish media's IA perspective, in which AI is expected to assist in tasks that humans find difficult but leave the human being in full control of the processes and outputs (Sne, 2022). Concerns exist regarding dystopian AI, particularly regarding privacy and data security. Reports highlight the use of personal data by AI systems, which affects privacy. Key issues include inequity, bias, access, ethical decision making, academic integrity, job losses, and neocolonialism. Framing highlights data bias, design bias, and specifically cultural bias as concerns unique to the local context. The ethical issues in this study are in tandem with those found by Ouchchy et al. (2020), showing their persistent relevance in the current discourse. However, what is unique is that they are intertwined with Africa's unique socio-economic realities, including complex issues of gender, race, labour, and power inequalities that were perpetuated during the colonial era. AI may not have existed during the colonial era, but the sociocultural and socioeconomic realities that it created have not been addressed in the present-day African context. Brokensha, Kotzé, and Senekal (2023) see AI ethical governance in Africa as a “wicked problem” (an unsolvable problem) because of the exclusion of the Global South worldwide in policy debates due to its colonial past.

The neocolonialism theme in AI systems reflects the social and political narratives of the Global North and South. Ntaka's (2023, 2024a) news stories demonstrate the Global South's resistance to colonialism through AI. “Data sovereignty” concerns and Ubuntu or Ujamaa philosophies aim to avoid the “Brussels effect” where the Global South replicates Northern policies without local context (Brokensha, Kotzé and Senekal, 2023). The Global North's AI policies focus on utilitarianism and deontology, leading to algorithmic exploitation in the labour market and perpetuating colonial inequalities. UNESCO (2022) suggests that South African countries should frame policies for responsible AI adoption within their context. Cassava Technologies' plan to build Africa's first AI factory may address data sovereignty and neocolonial challenges (Sagomba, 2025a).

The digital divide (e.g. low connectivity, high data costs, and power outages) is framed as a barrier to equitable AI adoption, exacerbating existing inequalities. Infrastructure investment is required to bridge this gap. Aghion (2023) noted AI's potential negative impact of AI on economic growth owing to hidden costs. Successful adoption requires infrastructure and supportive policies (Trabelsi, 2024). Some providers are upgrading their facilities to ensure data sovereignty and rural access (Muvundusi, 2022; Vinga, 2022). However, frames about job displacement are a significant concern, particularly given Zimbabwe's unemployment situation.

Alignment with regional and international policies

Zimbabwe's AI governance aligns with the AU, SADC, and UNESCO frameworks, addressing risks from external AI systems due to poor data and limited local context understanding (SADC, 2022). Zimbabwe supports AI through sector-specific legislation, while avoiding ethical concerns. Existing laws govern aspects of AI development, particularly data privacy and cybersecurity, following global regulatory trends (Engler, 2023). However, these policies are not comprehensive. The media advocates for a new ministry and regulatory authority beyond the ICTs Ministry and POTRAZ's mandates.

The Zimbabwean media inadequately covered the legal framework's alignment with international frameworks such as the Beijing AI Principles and Canada's Directive on Automated Decision-Making. Such discussions could reveal local needs and framework adaptations without conflict with national laws. Chiurunge (2024) noted that this legal gap deters AI innovation owing to enforcement challenges in data privacy.

The media do not track Zimbabwe's progress on regional and international AI commitments, including UNESCO's Ethics of AI Recommendation and the Parliament's Committee mandate to push for GoZ commitment ratification. Failure to do so may challenge Zimbabwe's ethical and responsible adoption of AI, as reflected in the recommendations.

A comparison with other studies found that the Zimbabwean media tends to be exemplary in raising Intellectual Property and copyright issues as compared to previous studies on news agencies, such as Chuan, Tsai, and Cho (2019), Guanah, Obi, and Ginikachukwu (2020), (Brokensha, 2020), Vergeer (2020), and Sne (2022). Perhaps at the time that these studies were conducted, Intellectual Property and copyright issues were not yet at the forefront of the ethical governance of AI. This may signify the dynamic nature of AI evolution, rather than an unusual instance.

Exploring data voids in the extant literature

News stories show a positive drive to raise AI awareness; however, data voids exist, including limited public voices and unclear AI governance reporting. Media outlets have not provided public space to participate in AI discourse, although the reasons remain unclear. This data void risk exploitation for spreading misinformation about AI. Media coverage overhides AI without a local Zimbabwean context and exaggerates job threats, thereby creating biased public opinion. Underresourced officials and citizens are vulnerable to echo chambers when these stories are used as primary sources (Flores-Saviaga, Feng and Savage, 2022). While journalists are key to developer and policymaker accountability, incomplete reporting can hinder their role. Inadequate investigation of AI ethical concerns and biases may leave stakeholders unaware until the problems escalate.

Charting the way forward

The findings reveal a lack of AI innovations in Zimbabwe due to insufficient investments in tech start-ups and AI expertise, with no evidence of local adoption despite media reports and reliance on foreign-designed tools (Chiurunge, 2024). The GoZ should collaborate with academia, industry, and stakeholders to fund/invest in AI research and development; raise public awareness of AI systems, ethics, and governance; and provide comprehensive training programs for the 4IR (Chiurunge, 2024). More importantly, there should be more diverse voices included in the news stories, including those of the public (as they are also consumers of AI), other stakeholders, and training journalists on AI reporting to be consistent with the UNESCO (2023) handbook for reporting on AI. Trabelsi (2024) suggests advocating independent audits, regulatory frameworks, and public participation in AI policy-making while adapting policies to local needs and future AI advancements. Perhaps these issues should form the basis of future discourses on AI.

A comprehensive framework and legislation are essential for adopting ethical AI across sectors. Dabengwa *et al.* (2025) proposed the FATE principles—Fairness, Accountability, Transparency, and Ethics/Authenticity—for Zimbabwe's higher education institutions (HEI). Media reports indicate lawmakers' favourable disposition towards AI governance frameworks.

There is a need to enhance awareness of AI governance issues beyond the benefits and threats. Media should increase the coverage of local AI initiatives to address societal readiness and the digital divide.

Trustworthiness of the data

The sensitising concepts from Bibliometrix and concept analysis from Leximancer were checked against the dataset to ensure an appropriate fit. These tools ground their analyses on the data while examining the semantic structure to visualise how concepts intersect with each other. More than one author was involved in the coding process to improve the quality of decisions made.

Limitations of the study

Although reviewing the ethics of AI use and governance using the frames espoused by the media can reveal critical discourses, this analysis does not fully show how society has accepted the issues covered by the media. In addition, the public may be unaware of the current policy and legal framework on AI use and deployment and ongoing policy discussions. The perspective shown in news stories reflects the views of media houses and journalists rather than society. AI use and governance occur in a VUCA (volatile, uncertain, complex, and ambiguous) environment in which certain aspects of this study's science map may change as new AI tools, regulations, and governance structures are created.

Conclusion

This study provides a comprehensive analysis of the representation of Artificial Intelligence (AI) in Zimbabwean media, with particular emphasis on ethical considerations, governance challenges, and societal implications. The analysis revealed a predominant narrative that frames AI as both a utopian opportunity and a dystopian threat, with the media placing greater emphasis on potential benefits rather than risks. Key themes, such as AI applications across various sectors, ethical considerations, governance challenges, and the urgent need for localised AI frameworks, are highlighted. Since 2016, the media's portrayal of AI has evolved significantly, with a notable increase in coverage during 2023-2024, coinciding with the rise of generative AI tools. However, a significant gap persists in reporting AI ethics and governance issues, which must be addressed to prevent misinformation. This study identifies critical data voids, including limited public voices and unclear AI governance reporting. The Zimbabwean media uniquely highlights concerns such as data sovereignty, neocolonialism, and the application of Ubuntu philosophy in AI development. Although the government's efforts to regulate AI usage and develop a national framework are acknowledged, the absence of specific timelines and milestones for policy implementation is a pressing issue. This study underscores the challenges in AI adoption in Zimbabwe, including limited infrastructure, high data costs, and insufficient expertise. To overcome these hurdles, it is imperative to increase investment in AI R & D, launch public awareness campaigns, implement comprehensive training programs, and establish clear AI frameworks and laws. Future research must delve into the public perception and acceptance of AI beyond media representations, track Zimbabwe's progress on regional and international AI commitments, and explore the implementation of AI innovations across sectors. Additionally, it is essential to amplify the diverse voices in AI discourse and enhance journalists' training in AI reporting. In conclusion, while the Zimbabwean media has made commendable strides in covering AI-related topics, there is an urgent need for more balanced, in-depth reporting on ethical and governance issues. As AI

continues to evolve, Zimbabwe must develop context-specific policies and frameworks that address local needs, while aligning with global standards.

References

- Adams, R. *et al.* (2024) *Global index on responsible AI 2024*. 1st edn. Cape Town: Global Center on AI Governance.
- Admin (2025) 'Zimbabwe unveils AI draft policy framework', *TechnoMag*, 21 November.
- Aghion, P. (2023) 'Making AI an opportunity for growth and employment', *LesEchos*, May.
- Bangure, N. (2024a) 'AI in healthcare: Friend or foe?', *Zimbabwe Independent*, June.
- Bangure, N. (2024b) 'AI in Zim: Let's engage together', *Zimbabwe Independent*, 22 March.
- Bangure, N. (2024c) 'Balancing AI threats, benefits', *Zimbabwe Independent*.
- Bangure, N. (2024d) 'Building a sustainable AI regulation framework', *Zimbabwe Independent*, 26 April, pp. 13–13.
- Bangure, N. (2024e) "'Future of AI: what to expect in 2025'", *Zimbabwe Independent*, December.
- Bangure, N. (2024f) 'Government to launch AI policy', *Zimbabwe Independent*, May.
- Bangure, N. (2024g) 'Is AI outpacing our control?', *Zimbabwe Independent*, May.
- Bangure, N. (2025a) 'AI agents reshaping business operations', *Zimbabwe Independent*, January.
- Bangure, N. (2025b) 'AI comes face-to-face with journalism in Zim', *Zimbabwe Independent*, July.
- Beaven, D. (2024) 'Future of machine learning, artificial intelligence', *The Herald* [Preprint].
- Bhebhe, N. (2023) 'Steward Bank taps into Artificial Intelligence', *The Chronicle*, June.
- Bowen, G.A. (2006) 'Grounded theory and sensitizing concepts', *International Journal of Qualitative Methods*, 5(3), pp. 12–23. Available at: <https://doi.org/10.1177/160940690600500304>.
- Brennen, A.J.S., Howard, P.N. and Nielsen, R.K. (2018) 'An industry-led debate: how UK media cover artificial intelligence', *Reuters Institute for the Study of Journalism Fact Sheet*, (December), pp. 1–10.
- Brokensha, S. (2020) 'Friend or foe? How online news outlets in South Africa frame artificial intelligence', *Ensovoort: Journal of Cultural Studies* [Preprint].
- Brokensha, S., Kotzé, E. and Senekal, B.A. (2023) *AI in and for Africa: a humanistic perspective*. Boca Raton, FL: CRC Press. Available at: <https://doi.org/10.1201/9781003276135>.
- Bulla-Musakwa, F. (2024) 'AI slowly redefining academic dishonesty', *The Sunday Mail* [Preprint].
- Chanthalangsy, P., Khodeli, I. and Xu, L. (2022) *Landscape study of AI policies and use in Southern Africa, UNESCO Southern Africa sub-Regional Forum on Artificial Intelligence*. Harare: UNESCO Regional Office for Southern Africa.

- Chikandiwa, H. (2023) 'Embrace AI in parliamentary processes: Mudenda', *NewsDay*, September.
- Chikomo, M. (2023) 'Interview: "Policy intervention can enable adoption of AI"', *Zimbabwe Independent*, December. Available at: <https://www.newsday.co.zw/theindependent/local-news/article/200020975/interview-policy-intervention-can-enable-adoption-of-ai#:~:text=We must have policy interventions,private sector and civil society>.
- Chimhangwa, K. (2020) 'How Zimbabwe's Biometric ID Scheme (and China's AI Aspirations) Threw a Wrench into 2018 Election', *Global Voices*, January. Available at: <https://example.org>.
- Chipungu-Chimbga, B. (2023) 'Artificial Intelligence and the future of jobs in Zimbabwe', *The Zimbabwe Mail*.
- Chirenje, G. (2024) 'Harnessing the transformative power of AI for young women', *Zimbabwe Independent*, June.
- Chitumba, P. and Mupanedemo, F. (2024) "'Harness ICT to improve service delivery'", *The Herald*, March.
- Chiurunge, P. (2024) 'Exerpt Interview', in *The Information Society Watch: Artificial Intelliegence in perspective*. Harare: Dr Panashe Chiurunge- Chief AI Scientist, Deep Analytics Intelligencia, pp. 30–47.
- Chuan, C.-H., Tsai, W.-H.S. and Cho, S.Y. (2019) 'Framing Artificial Intelligence in American newspapers', in *Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society*. New York, NY, USA: ACM, pp. 339–344. Available at: <https://doi.org/10.1145/3306618.3314285>.
- Dabengwa, I.M. *et al.* (2025) 'The current state of artificial intelligence use and its ethical implications in higher education in Zimbabwe', in B.J. Holland (ed.) *Handbook of Trends and Innovations Concerning Library and Information Science*. Berlin: De Gruyter Saur, pp. 561–588. Available at: <https://doi.org/10.1515/9783111443003-025>.
- Dhliwayo, B. (2025) 'City Parking embraces AI', *Daily News*, March.
- Duruson, S. (2023) 'Kuda Musasiwa's Mission to Build AI Tailored for Africa', *Tech In Africa*, May. Available at: <https://www.techinafrica.com/kuda-musasiwas-mission-to-build-ai-tailored-for-africa/>.
- van Eck, N.J. and Waltman, L. (2023) *Manual for VOSviewer version 1.6.20*. Leiden: University of Leiden.
- Engler, A. (2023) *The AI regulatory toolbox: How governments can discover algorithmic harms*. Brookinga Edu.
- Flores-Saviaga, C., Feng, S. and Savage, S. (2022) 'Datavoidant: an AI system for addressing political data voids on social media', *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), pp. 1–34. Available at: <https://doi.org/10.1145/3555616>.
- Głaz, A. and Trofymczuk, A. (2020) 'Voice and viewpoint in journalistic narratives', *Language Sciences*, 80, pp. 1–10. Available at: <https://doi.org/10.1016/j.langsci.2020.101274>.
- Guanah, S.J., Obi, I. and Ginikachukwu, A.C. (2020) 'Artificial Intelligence and its reportage

in select Nigerian newspapers: a content analysis', *International Journal of Language and Literary Studies*, 2(2), pp. 45–61. Available at: <https://doi.org/10.36892/ijlls.v2i2.298>.

January, A. (2025) 'Zimbabwe commits to ethical AI usage', *The Herald*, March.

Josphat, B. (2024) 'Government moves to regulate AI', *Daily News*, May.

Kahari, A. (2025a) 'AI evolution: what's the end game?', *Zimbabwe Independent*, February.

Kahari, A. (2025b) 'AI here to stay, so is real intelligence', *Zimbabwe Independent*, February.

Langa, R.M. (2025) 'Ethics of AI in art: how does it affect local artists and creative industry?', *Zimbabwe Independent*, February.

Lupande, F. and Zhakata, I. (2022) 'TelOne's US\$5m centre boost for data storage', *The Herald*, March.

Mabhachi, T. and Sibanda, N. (2025) 'Slow AI penetration in Africa', *Zimbabwe Independent*, January.

Madamombe, R. (2017) 'PyCon Zimbabwe Day 2-Artificial Intelligence, programming in Universities and organizing coding events for kids', *TechZim*, August.

Makura, F. and Mugonde, K. (2024) 'The nexus between Artificial Intelligence and African states', *The Chronicle*, April.

Moyo, D. (2024) 'Tech revolution canvassing for ministry of AI in Zim', *Zimbabwe Independent*, 16 February.

Muchetu, R. (2024) 'Establish ethical frames for AI use — Dr Muswere', *Sunday News*, September.

Mugadzaweta, S. (2024) 'Balancing innovation and ethics: the urgent call for AI regulation', *NewsDay*, September.

Muponde, R. (2023) "'Home-grown systems needed to tackle social media imperialism'", *Sunday Mail*, March.

Muronzereyi, B. (2024) 'Zimbabwe faces 68pc skills shortage — Minister', *Daily News*, May.

Mushohwe, G.T. and Kakudie, L.N. (2024) 'Artificial Intelligence and the future of democracy in Zimbabwe', *The Herald* [Preprint].

Mushoriwa, T.B. (2024) 'AI governance in Zim: The need for AI- focused patent office', *NewsDay*, May.

Muswere, J. (2025) 'New era of press freedom, ethics and digital growth', *Sunday Mail*, May.

Mutambara, A. (2023) 'Artificial intelligence and robotics: great expectations and daunting existential risks', *NewsDay*, May.

Mutambara, A.G.O. (2024) 'Developing and adopting AI', *Zimbabwe Independent*, April.

Mutangadura, J. (2024) 'AI at the crossroad: a new frontier for education in Africa today and beyond', *The Herald*, April. Available at: <https://www.herald.co.zw/ai-at-the-crossroad-a-new-frontier-for-education-in-africa-today-and-beyond/>.

- Muvundusi, J. (2022) 'TelOne invests US\$4 million in data centre', *Daily News*, April.
- Ncube, S. (2023) 'Integration in its newsroom!', *CITE*, October.
- Ncube, Y. (2024) 'Govt moves to address brain drain', *Daily News*, June.
- Ndlovu, B. (2024) 'President Mnangagwa launches ICT, Smart Master plan and Broadband plan', *The Chronicle*, March. Available at: <https://www.chronicle.co.zw/president-mnangagwa-launches-ict-smart-master-plan-and-broadband-plan/>.
- Ndlovu, M. (2024) 'Audience perceptions of AI-driven news presenters: A case of "Alice" in Zimbabwe', *Media, Culture & Society*, 46(8), pp. 1692–1706. Available at: <https://doi.org/10.1177/01634437241270982>.
- Ndoro-Mukombachoto, G. (2024) 'AI: benefits, concerns in the education sector', *Zimbabwe Independent* [Preprint].
- Nkomo, C. (2025) 'Zimbabwe misses the boat on billionaire Strive Masiyiwa's AI factory as South Africa strikes jackpot', *New Zimbabwean*.
- Ntaka, J. (2023) 'Africa must embrace AI through decolonial innovation', *The Chronicle*, December.
- Ntaka, J. (2024) 'How to regulate ai without falling into the neo-colonial trap', *The Herald*, February.
- Nyawo, L. (2024) 'Digital accessibility, intersectionality', *Zimbabwe Independent*, May.
- Ouchchy, L., Coin, A. and Dubljević, V. (2020) 'AI in the headlines: the portrayal of the ethical issues of artificial intelligence in the media', *AI and Society*, 35(4), pp. 927–936. Available at: <https://doi.org/10.1007/s00146-020-00965-5>.
- Oxford Insights (2023) *Government AI Readiness Index 2023*.
- Project for Excellence in Journalism (2023) *State of the News Media*. Zimbabwe Centre for Media and Information Literacy (ZCMIL); Konrad Adenauer Stiftung (KAS).
- Reporter, S. (2023) 'Zim Parliament to set Committee on future of Artificial Intelligence', *The Zimbabwe Mail*. Available at: <https://www.thezimbabwemail.com/technology-science/zim-parliament-to-set-committee-on-future-of-artificial-intelligence/>.
- Reporter, S. (2024) 'NetOne to construct 300-acre smart city', *Daily News*, June. Available at: <https://dailynews.co.zw/netone-to-construct-300-acre-smart-city/>.
- Russell, S.J. and Norvig, P. (2013) *Artificial intelligence: a modern approach*. London: Pearson Education Limited.
- Sagomba, E. (2025a) 'Africa's first AI factory: What it means for Zim, continent', *Zimbabwe Independent*, April.
- Sagomba, E. (2025b) 'AI and new world order', *Zimbabwe Independent*, March.
- Sagomba, E. (2025c) 'Anthropomorphism in AI', *Zimbabwe Independent*, March.
- Sagomba, E. (2025d) 'The call for establishment of ZAIGRF, ZAIRA', *Zimbabwe Independent*, February.
- Sagomba, E. (2025e) 'The hidden dangers of AI (I)', *Zimbabwe Independent*, May.

- Saldaña, J. (2021) *The coding manual for qualitative researchers*. 3rd edn. Los Angeles: SAGE Publications Inc.
- Sengere, L. (2023a) ‘American experts on why ChatGPT is not available in Zimbabwe’, *TechZim*, October.
- Sengere, L. (2023b) ‘Govt should establish Committee of the Future to research how to best use AI as Speaker of Parliament urges’, *TechZim*, November.
- Sengere, L. (2023c) ‘Zimbabwe is not ready to take full advantage of what AI has to offer’, *TechZim*, 10 October.
- Sengere, L. (2024) ‘Here’s what former Deputy Prime Minister Mutambara had to say about Zim’s readiness for AI’, *TechZim*, 9 February.
- Sibanda, P. (2025) ‘Equip students with skills that machines cannot replicate: EU envoy’, *NewsDay*, May.
- Smith, A.E. and Humphreys, M.S. (2006) ‘Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping’, *Behavior Research Methods*, 38(2), pp. 262–279. Available at: <https://doi.org/10.3758/BF03192778>.
- Sne, S.H. (2022) ‘Public AI imaginaries: how the debate on artificial intelligence was covered in Danish newspapers and magazines 1956-2021’, *Nordicom Review*, 43(1), pp. 56–78. Available at: <https://doi.org/10.2478/nor-2022-0004>.
- Southern African Development Community (2022) *Windhoek Statement on Artificial Intelligence in Southern Africa*, Windhoek (Namibia), 9 September 2022.
- Staff Reporter (2024) ‘Sophia unveiling: a turning point for Africa’s tech ambitions’, *The Herald*, December.
- TechZim (2023) ‘AI use in healthcare: opportunity or threat?’, *TechZim*, October.
- Tigere, D. (2023) ‘Artificial Intelligence and disability’, *Zimbabwe Independent*, 3 November. Available at: <https://www.newsday.co.zw/theindependent/business-digest/article/200018954/artificial-intelligence-and-disability>.
- Trabelsi, M.A. (2024) ‘The impact of artificial intelligence on economic development’, *Journal of Electronic Business & Digital Economics*, 3(2), pp. 142–155. Available at: <https://doi.org/https://doi.org/10.1108/JEBDE-10-2023-0022>.
- Tshuma, L., Ndlovu, M. and Dhladhla, Z.N. (2024) ‘Freelance journalism in Zimbabwe: Challenges and opportunities’, *Journalism* [Preprint]. Available at: <https://doi.org/10.1177/14648849241257119>.
- Tutani, K. (2024) ‘How to develop Zimbabwean workers for the future’, *ZBC News*.
- UNESCO (2023) *Reporting on Artificial Intelligence: a handbook for journalism educators*. Edited by M. Jaakkola. Paris: UNESCO.
- Vergeer, M. (2020) ‘Artificial Intelligence in the Dutch Press: an analysis of topics and trends’, *Communication Studies*, 71(3), pp. 373–392. Available at: <https://doi.org/10.1080/10510974.2020.1733038>.
- Vinga, A. (2022) ‘TelOne’s US\$4 Million Facility To Enhance Data Sovereignty’, *New Zimbabwean*, March. Available at: <https://www.newzimbabwe.com/telones-us4-million->

facility-to-enhance-data-sovereignty/.

West, M., Kraut, R. and Chew, H.E. (2019) *I'd blush if I could: closing gender divides in digital skills through education*. Geneva. Available at: <https://doi.org/10.54675/RAPC9356>.

Writer, S. (2023) “Embrace technology to advance Parliament”, *Daily News*, September.

Writer, S. (2025) “AI a double-edged sword in education”, *Daily News*, April.

Zirima, P. (2020) *A media landscape study: unpacking ownership in Zimbabwe's creation and delivery of news content*. Harare: Friedrich-Ebert-Stiftung Zimbabwe; Media Monitoring Project Zimbabwe.