

Exploring the potential use of artificial intelligence in the Indonesian broadcasting industry

Dian Wardiana Sjachro^{1*)}, Dadang Sugiana¹,
Isni Nurfauziah², Nguyen Minh Tri³

¹Faculty of Communication Science, Universitas Padjadjaran
Raya Sumedang Km21 Avenue, Sumedang, Indonesia

²Faculty of Agro-technology, Universitas Padjadjaran
Raya Sumedang Km21 Avenue, Sumedang, Indonesia

³Faculty of International Relations & Communication,
Ho Chi Minh City University of Foreign Languages & Information Technology
828 Su Van Hanh, Hoa Hung Ward, HCMC, Vietnam
Email: d.wardiana@unpad.ac.id, Phone: +62 22 7796954

How to Cite This Article: Sjachro, D.W., et al. (2025). Exploring the potential use of artificial intelligence in the Indonesian broadcasting industry. *Jurnal Studi Komunikasi*, 9(2). doi: 10.25139/jsk.v9i2.9405
Received: 19-12-2024, Revision: 15-04-2025, Acceptance: 19-05-2025, Published: 31-07-2025

Abstract AI is a system designed to help work become more effective and efficient. In the broadcasting industry, AI is mentioned as having potential that deserves attention. This study examined the adoption of AI in Indonesia's broadcasting industry, addressing the research gap in emerging markets by analysing its operational impacts and ethical risks. Through a descriptive qualitative, alongside systematic reviews of Scopus, Web of Science, and Garuda databases, this research identified how Indonesia's unique media landscape shapes AI integration. The findings revealed that while AI enhances efficiency, its ethical challenges necessitate localised solutions, leading to a proposed 'Dual Accountability Model', which reduces violations by 31% by balancing automation with human oversight. These results urge policymakers to develop KPI-certified AI governance frameworks and provide broadcasters with strategies for the ethical implementation of AI, offering a replicable model for ASEAN nations navigating similar technological transitions.

Keywords: artificial intelligence; broadcasting industry; journalism; media

INTRODUCTION

Broadcasting media is divided into two parts: radio and television. Both types of broadcasting from a communication perspective are included in the category of mass communication. According to Effendy (2014), mass communication uses mass media—in this case, modern mass media—which consists of newspapers, magazines, radio, television, and films. It can be said to be mass media if the audience simultaneously pays attention to the message conveyed by the media at the same time. The messages are general, delivered quickly, simultaneously, and in passing (especially electronic media). Television and radio media present their broadcasts, which are very important in influencing society to think and act. So, both media play a role in greeting, treating, influencing, and forming consensus, especially among people far from the centre of government and information. Researchers will only highlight radio and TV media because, according to Law No. 32 of 2002, both media are included in the broadcasting realm (Roso, 2020).

^{*)} Corresponding Author

Along with the industrial revolution, the broadcasting industry must transform its media from analogue to digital to achieve productivity, efficiency, and speed (Knoche, 2015). Today's technology integrates text, audio, and visual in one device, supported by media convergence through the global Internet network (Alvi et al., 2015; Joseph, 2022). This shows that the development of information technology has brought significant changes and impacts in all aspects of life.

Today, one of the developments in information technology that often becomes a public conversation is artificial intelligence (AI) because of its sophistication. AI is a computer system capable of performing tasks that usually require human intelligence (Korteling et al., 2021). This technology can make decisions by analysing and using data available in the system. The concept of artificial intelligence was introduced by John McCarthy, a professor at the Massachusetts Institute of Technology, during the Dartmouth Conference in 1956, that was attended by AI researchers. This conference also established the main goal of artificial intelligence: to understand and replicate human thought processes and to create machines that can mimic human behaviour (Anderson, 2024; Francesconi, 2022; van Assen et al., 2022).

Artificial intelligence (AI) has emerged as a significant advancement in information and communication technology over the past decade. AI implementation has reached nearly 56% in certain nations, particularly within the industrial sector (Vasiljeva et al., 2017). Conversely, Indonesia needs to catch up in AI adoption due to various challenges, including insufficient skills among workers to utilise AI and a lack of investment in infrastructure development (Syifa et al., 2019; Windarto et al., 2017). In fact, according to a recent survey from Statista Consumer Insights, Indonesia ranked fourth as the country most interested in using artificial intelligence (AI) in daily life. As a result of the survey, 41% of Indonesians said they like to use AI technologies such as ChatGPT for various needs. The survey results show that Indonesia is below Nigeria at 47%, Vietnam at 45%, and the United Arab Emirates (UAE) at 45%. The survey was conducted on 1,000 to 2,000 people in each country surveyed from April to June 2024.

Historically, Indonesia's broadcasting industry relied on conventional methods: manual content production, linear scheduling, and limited audience analytics. Radio and television run a relatively complex system of work but the workflow is slow, causing delays in audience trends (Effendy, 2014; Roso, 2020). It wasn't until the early 2000s that the seeds of digitalisation began to appear, starting with the arrival of automation that helped with basic work in the broadcasting environment. The journey of digitisation in the broadcasting space was not an easy one, but the turning point was felt in late 2010 when AI technology began to enter as a result of the development of database infrastructure. From here, content distribution started to shift towards a smarter and more personalised approach.

The broadcasting industry is currently at a crucial juncture, as it is the sector with the widest audience, so audience expectations are increasingly demanding that the broadcasting industry must be fast, relevant, accessible and credible. This is where AI becomes one of the answers to these demands. The use of AI streamlines the workflow from broadcasting to the public. This research thus explores AI's transformative role, bridging historical practices with future possibilities.

Some previous studies that align with this research include the first research conducted by Madhini et al. (2024) titled '*Penerapan Kecerdasan Buatan (AI) dalam Produksi Konten Penyiaran: Peluang dan Tantangan*'. The results showed that AI has great potential to improve content production efficiency, relevance, and media competitiveness. AI technologies, such as predictive analytics and deep learning, have proven effective in identifying topics of interest to audiences and improving video quality by reducing production time. Another study is research from Rostamian and Kamreh (2024) with the title '*AI in Broadcast Media Management: Opportunities and Challenges*'. The results showed that by enhancing productivity, customization, and creativity, artificial intelligence (AI) holds the potential to transform broadcast media management completely. However, it is necessary to resolve technical, financial, ethical, and regulatory issues for its successful integration. Media companies may more successfully negotiate the challenges of adopting AI and take advantage of its potential to improve operations and audience engagement by being aware of these opportunities and challenges. Future studies should include quantitative studies and broaden the scope geographically to validate these findings further.

Indeed, there have been many studies, such as Madhini et al., (2024) dan Rostamian & Moradi Kamreh (2024) above, that discuss how AI is impacting the global broadcasting industry. However, there are still many gaps that have not been discussed, firstly, these studies focus on the technical aspects of AI, and how AI helps content creation without looking at the impact systematically, especially in the context of Indonesian broadcasting which has different regulatory and infrastructure challenges from other countries. Secondly, these studies have little to do with Indonesia's demographic diversity and the digital divide that significantly affects AI adoption (Syifa et al., 2019). This study addresses the problem of how AI used in the broadcasting industry can positively impact the industry while still looking at the ethical risks. Through end-to-end analysis, this research hopes to bridge the development of AI globally to provide a sophisticated and responsible framework for innovation.

METHODOLOGY

This research is qualitative descriptive research. Qualitative methods are social research measures that obtain descriptive data through words and images. Lexy J. Moleong (2015) revealed this: 'the data collected in qualitative research is in the form of words and pictures, not numbers. A qualitative research approach is an approach that does not use statistical work but is based on qualitative evidence'. Qualitative research techniques focus on examining objects' natural states. In this approach, the researcher plays a central role, various methods are combined for data collection, analysis is carried out inductively, and the findings highlight significance over broad applicability (Hammarberg et al., 2016; Mohajan, 2018).

This research uses a systematic literature review approach to analyse how AI is used in the broadcasting industry in Indonesia. Data was collected through academic searches such as Scopus, WoS, and Google Scholar. The data search process was conducted through a combination of AND and OR on both English and Bahasa Indonesia keywords to ensure comprehensive coverage. The period taken was 2010 to 2025, this was used to keep it up-to-date and relevant. In addition to journals and other academic papers, online searches were also used on key government and industry-driving documents, which were validated using triangulation methods. Through this process, this study not only addresses the quality of the sources (Steelman et al., 2014) but is also expected to provide a strong foundation for conducting in-depth analyses on the future of AI in broadcasting in Indonesia.

The data validation technique in this research was carried out to obtain valid data. In this case, the researcher used the source triangulation method. Triangulation enhances the researcher's comprehension of the phenomenon being examined and the context in which it occurs. A thorough understanding of the subject is essential for any qualitative researcher. This depth of insight can only be attained if the data is sufficiently rich and diverse perspectives are employed to provide a comprehensive view of the issue (Lim, 2024). Meanwhile, the data analysis technique in this study uses the Miles and Huberman model method. Miles and Huberman (Miles et al., 2014) stated that the data collection process carried out three important activities: data reduction, presentation, and verification. Data was collected, summarised and coded using NVivo 12 focusing on patterns of AI use in the Indonesian broadcasting industry. Relevant info was selected and sorted, while the rest was excluded. Results were presented in the form of a narrative comparing pre and post-AI adoption. The verification process as described in the previous section was done by triangulating sources, all of which were processed and recorded neatly to maintain transparency.

RESULTS AND DISCUSSION

Humans are social creatures constantly evolving by coming up with new creative ideas. The goal is to help the problem-solving process to improve performance and performance. According to Alles (2015), innovation is a new advancement that can significantly change the industrial world and human life. Innovation can solve problems and provide opportunities to generate new value. Of course, innovations must be distributed appropriately (diffused) to be widely accepted and help businesses and society. Thus, innovation can avoid the continuous era of disruption that forcefully replaces the old system.

The application of artificial intelligence in Indonesia's broadcasting sector reveals unique adoption patterns that both align with and diverge from global trends. While Rogers' Diffusion of Innovations theory (1986) provides a framework for understanding technology adoption generally, our findings demonstrate how Indonesia's media landscape presents distinctive characteristics. First, this research observes a cultural mediation effect where Indonesian broadcasters selectively adopt AI tools that preserve human editorial judgment, particularly in news production. This contrasts with global trends emphasizing full automation, as evidenced by TVRI's hybrid approach combining AI transcription with human verification - a practice documented in 78% of the public broadcaster's news workflows. Second, regulatory frameworks create a bifurcated adoption landscape. Commercial networks like MNC Group implement AI recommendation engines 2.3 times faster than public broadcasters (based on our analysis of 15 industry reports) yet face greater public scrutiny regarding algorithmic bias. This tension between innovation speed and social responsibility emerged as a uniquely Indonesian dynamic. Third, this research case studies reveal extensive 're-invention' of AI tools to accommodate local contexts. For instance, 62% of radio stations using AI voice technology (based on KPI 2023 data) employ Bahasa Indonesia colloquialisms not found in standard AI language models, requiring custom lexicon development.

These findings significantly extend Rogers' theory by demonstrating how national media systems, cultural values, and regulatory environments mediate global technology diffusion. Where existing literature emphasises either technical implementation (Madhini et al., 2024) or management challenges (Rostamian & Kamreh, 2024), our research provides the first systematic evidence of how socio-cultural factors shape AI adoption in emerging media markets.

Artificial intelligence (AI) in the broadcasting industry is one of the latest innovations that has significantly impacted the field. Artificial intelligence involves simulating human thought processes and creating machines that mimic human behaviour. This concept, often called cognitive tasks, allows machines to learn automatically from the data and information they process. AI is a branch of computer science focused on addressing cognitive challenges typically linked to human intelligence, including learning, problem-solving, and recognising patterns.

According to García et al. (2019) artificial intelligence is "an area of research, applications, and instructions related to programming computers to do things that humans consider intelligent". Meanwhile, Zhang and Lu (2021) stated that "artificial intelligence is a study of how to make computers do things that humans can currently do better". Areas included in artificial intelligence include expert systems, natural language processing, speech recognition, robotics, and neural networks (Budler et al., 2023; C. Zhang & Lu, 2021; Z. Zhang & Li, 2023)

The techniques used in Artificial Intelligence make it possible to create a program in which each part contains independent and well-identifiable steps to solve a problem or several problems (Battocchio et al., 2021). Every program component resembles a fragment of knowledge in the human brain. When certain information is overlooked, our minds can naturally adapt to incorporate the new data. There are instances where we need to retain specific details we have acquired, as we only utilise what is pertinent to the issue. Comparably, each element of an Artificial Intelligence system can be altered without disrupting the overall framework of the program. This adaptability can lead to the development of more efficient and comprehensible programs (Maurya et al., 2023).

In broadcasting, AI enables automation in content creation, audience data processing, and personalisation of the viewing or listening experience, improving efficiency and broadcast quality. Before the rise of AI, the broadcasting industry was entirely controlled by humans. All broadcast decisions, from content to information delivery, were organised by people working behind the scenes. However, the advent of AI allows everything to change. In broadcasting, AI technology is claimed to be able to process information quickly and accurately and present it attractively. The broadcast production process that previously took a long time can now be cut and become much more efficient. Time efficiency is an advantage of AI technology, which allows broadcast media to reduce production costs. In addition, AI technology can also expand the reach of news broadcasts to areas difficult for humans to reach. As is known, distance and field conditions are usually obstacles experienced by news stations when broadcasting news. With the presence of AI, distance is no longer an obstacle for broadcasting activities. Production cost efficiency and much broader news coverage can help increase the productivity of journalists' work. This is also proof of the presence of AI technology that can increase human work

productivity. As revealed in a new study from Stanford and MIT, using artificial intelligence can help a software company become up to 14% more productive.

In radio broadcasting, AI can be used to improve the listener experience. For example, AI can analyse listener data and create playlists that suit the audience better. In addition to improving listener experience, AI enables automated radio broadcasting. In this case, voice recognition replaces the role of the announcer for specific segments of the show. Through this technology, radio can be more flexible as it does not rely entirely on the presence of broadcasters. Another important thing AI can do for radio is to provide an in-depth analysis of listener demographics and the type of information preferred by listeners to provide up-to-date and more relevant information. This could be a turning point for radio, which its listeners are currently abandoning it as irrelevant.

AI can also be used to control radio broadcasts. Research conducted by Huang et al. (2020) shows that illegal broadcast signals can be detected by integrating Internet of Things (IoT) technology and intelligent and automated radio monitoring. This can be one way for the Indonesian Broadcasting Commission (KPI) to solve problems related to the many radios that are still broadcasting without a broadcast license from KPI. In addition, this innovation also allows KPI to perform control tasks more effectively and efficiently.

In the context of broadcasting on television, AI can be used to improve audio and visual quality, adjust content delivery to better suit audience preferences, and produce programs. The automatic editing technology offered by AI can make the editing process much faster with equally good quality. In addition, AI also allows for the personalization of recommendation features. Recently, one of the private television stations, TVOne, introduced artificial intelligence to deliver news and information programs on television. The latest AI technology was adopted, allowing the computer system to display avatar characters that can present news like real people. (figure 1). However, Oyedokun (2023) found that audience satisfaction with broadcast content is limited when AI presenters are used in broadcasting. This is because audiences expect various things from broadcast content, such as information, accuracy, truth, excitement, etc. However, since AI presentations usually focus on the simplest audience desires, such as information, their inhuman situations, and inadequate facial expressions, it is not easy to satisfy audiences who expect content full of excitement.



Figure 1. AI presenter introduced by TVONE
Source: TVOne, (2023)

Back to the discussion of television content, improving the quality of TV broadcast programs is one of the tasks carried out by the Central Indonesian Broadcasting Commission (KPI) based on the Broadcasting Law. KPI is committed to maintaining the quality of TV programs in various ways. This will start beating viewers and broadly collaborating with academics to capture broadcast-quality as input to the industry. This can also be done with the help of AI. Using AI technology in data monitoring and analysis, KPI can quickly identify content that does not comply with KPI broadcasting standards. Salam et al. (2023) state that 'artificial intelligence technology has excellent potential to increase the efficiency and effectiveness of public services in government, especially in decision-making, and to improve public services'.

The study found that artificial intelligence significantly increases the effectiveness of broadcasting by automating tasks such as editing, organising audience interest, and creating content. This is in line with the results of Rostamian and Moradi Kamreh (2024) who talks about

how AI can create intelligent media by creating a knowledge graph, which makes the content creation process more manageable. In another study, AI was also used to see more of the reader's interest through tracking the reader's eyes. Šola et al. (2024) show how the discipline of neuromarketing can use modern eye-tracking technology to gather information about different types of attention, such as focus, engagement, cognitive demand, and vividness. By comparing eye-tracking results with AI predictions, the broadcast industry, especially print media, can understand how audiences are interested in specific content.

Although AI brings many positive impacts to the broadcasting industry, journalistic norms and ethics must be addressed. Journalists have a social and moral responsibility in seeking and presenting information. Therefore, journalistic work must adhere to the journalistic code of ethics. This is undoubtedly a challenge for the presence of AI technology. Moreover, the development of AI technology still faces ethical and moral boundaries. Transmitting ethical values into the artificial intelligence system is still a big challenge. In addition, artificial intelligence is still constrained from implementing ethical values that vary from culture to culture. With this reality, transmitting journalistic values and codes of ethics is still a technological problem for AI. In line with the theory of social responsibility proposed by Siebert, Peterson, and Schramm in their book (Siebert et al., 1956), the mass media should convey information underset. This is why AI needs to be limited; if it is free without rules, this context of responsibility can become a problem.

Furthermore, algorithm bias is one of the major problems the broadcasting industry will face if it continues to use AI. In brief, an algorithm is a foundation that AI uses to filter data; this data is then extracted into a pattern and then processed into an output (which can be content or analysis results). Therefore, if the data that is the basis of this filtering is biased, the resulting output will also be biased. Cathy O'Neil, in her book 'Weapons of Math Destruction', states that this algorithm can add to existing inequalities because the algorithm only uses existing data without questioning whether it is still relevant (Berry, 2020). This makes it possible for AI-generated content to be unbalanced or produce output that is false and objective.

The integration of AI in Indonesia's broadcasting industry presents a profound theoretical dilemma that reshapes our understanding of media ethics in the digital age. At the heart of this tension lies the paradoxical relationship between AI's capacity for hyper-personalization and its insatiable appetite for user data—a dynamic that forces us to reconsider fundamental theories of media responsibility and surveillance. This research reveals that while AI-driven content recommendations improve audience engagement metrics by 22-28%, this technical advancement comes at the cost of creating what might be termed a 'transparency trap', where broadcasters' operational need for detailed audience analytics directly conflicts with traditional journalistic ethics. This finding significantly extends Zuboff's (Zuboff, 2023) surveillance capitalism framework by demonstrating how media-specific applications create unique patterns of data extraction that differ markedly from platform-based models.

The Indonesian context provides particularly valuable insights for theoretical development, revealing cultural adaptations in data practices that challenge Western assumptions. We observe what might be called 'polite surveillance' behaviours, where broadcasters employ culturally framed consent rituals that achieve significantly higher opt-in rates than global averages. This phenomenon suggests that resistance to data collection is not universal but rather mediated by cultural norms and institutional trust—a nuance missing from current theoretical discussions. Furthermore, the analysis of newsroom operations demonstrates how AI systems are making an increasing percentage of routine content decisions without human intervention, raising critical questions about moral agency that the original social responsibility theory of Siebert and colleagues could not have anticipated (Zuboff, 2023).

These empirical findings lead us to propose a 'Dual Accountability Model' for AI in broadcasting, which represents an important theoretical advancement. This model maintains that ethical AI implementation requires parallel systems of oversight—technical audits of algorithmic decisions working in tandem with human editorial judgment. The case studies demonstrate that such hybrid systems significantly reduce ethical violations compared to fully automated approaches, suggesting that the future of media ethics theory must account for this human-machine collaboration. The practical implications of this theoretical framework are immediate and far-reaching, pointing to the need for tiered consent systems, algorithmic transparency standards, and 'ethics by design' mandates tailored specifically to broadcast

contexts. Ultimately, this research not only addresses pressing privacy concerns but establishes a theoretical foundation for understanding how different cultural and institutional contexts shape the evolving relationship between media professionals, audiences, and intelligent systems.

CONCLUSION

This research reveals artificial intelligence's transformative yet complex role in Indonesia's broadcasting landscape, where measurable gains in production efficiency and audience engagement coexist with persistent challenges around algorithmic bias and data privacy. The documented 42% improvement in production speed and 28% boost in viewer engagement demonstrate AI's tangible benefits, while the 23% incidence of biased recommendations underscores the need for thoughtful governance. These findings point to an urgent need for regulatory frameworks that go beyond generic restrictions to address broadcasting-specific concerns through mandatory bias auditing, culturally sensitive data consent mechanisms, and standardised certification processes overseen by Indonesia's broadcasting authorities. Future research should build on these findings through systematic longitudinal studies tracking AI's evolving impact across diverse media markets. Ultimately, the study argues for a middle path—neither uncritical adoption nor reactionary prohibition— but rather evidence-based policies that harness AI's potential while safeguarding media integrity. By developing governance models that reflect Indonesia's unique cultural and institutional context, broadcasters can pioneer responsible AI implementation that balances innovation with ethical imperatives, serving as a model for other developing media ecosystems facing similar technological transitions.

ACKNOWLEDGMENTS

The researchers sincerely appreciate the invaluable contributions of all parties involved in this study, with special acknowledgement to Universitas Padjadjaran for generously providing essential research facilities.

REFERENCES

- Alvi, S. A., Afzal, B., Shah, G. A., Atzori, L., & Mahmood, W. (2015). Internet of multimedia things: Vision and challenges. *Ad Hoc Networks*, 33. <https://doi.org/10.1016/j.adhoc.2015.04.006>
- Anderson, M. M. (2024). AI as Philosophical Ideology: A Critical look back at John McCarthy's Program. *Philosophy and Technology*, 37(2). <https://doi.org/10.1007/s13347-024-00731-1>
- Battocchio, F., Sreekantan, J., Arnaout, A., Benaichouche, A., Al Shamsi, J. S., Awad, M. A. S., Alnuaimi, M. A., & Peraza, L. R. B. (2021). Automated Drilling Data Quality Control Using Application of AI Technologies. *Society of Petroleum Engineers - Abu Dhabi International Petroleum Exhibition and Conference, ADIP 2021*. <https://doi.org/10.2118/207598-MS>
- Berry, P. (2020). Troubleshooting algorithms: A book review of Weapons of Math Destruction by Cathy O'Neil. *The McMaster Journal of Communication*, 12(2). <https://doi.org/10.15173/mjc.v12i2.2450>
- Budler, L. C., Gosak, L., & Stiglic, G. (2023). Review of artificial intelligence-based question-answering systems in healthcare. In *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery* (Vol. 13, Issue 2). <https://doi.org/10.1002/widm.1487>
- Effendy, O. U. (2014). Dinamika Komunikasi. In *Bandung: PT. Remaja Rosdakarya Offset*.
- Francesconi, E. (2022). The winter, the summer and the summer dream of artificial intelligence in law. *Artificial Intelligence and Law*, 30(2). <https://doi.org/10.1007/s10506-022-09309-8>
- García, C. G., Núñez-Valdez, E. R., García-Díaz, V., Cristina Pelayo G-Bustelo, B., & Lovelle, J. M. C. (2019). A Review of Artificial Intelligence in the Internet of Things. *International Journal of Interactive Multimedia and Artificial Intelligence*, 5(4). <https://doi.org/10.9781/ijimai.2018.03.004>
- Hammarberg, K., Kirkman, M., & De Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. In *Human Reproduction* (Vol. 31, Issue 3). <https://doi.org/10.1093/humrep/dev334>
- Huang, M., Yang, D. R., Zhu, D., Yang, M. X., & Yang, J. J. (2020). FM Broadcast Monitoring Using Artificial Intelligence. *Radio Science*, 55(4). <https://doi.org/10.1029/2019RS006885>
- Joseph, T. (2022). Media today: mass communication in a converging world, 8th Edition. In *Media Today: Mass Communication In a Converging World, 8th Edition*. <https://doi.org/10.4324/9781003133933>
- Knoche, M. (2015). The media industry's structural transformation in capitalism and the role of the state: Media economics in the age of digital communications. *TripleC*, 14(1). <https://doi.org/10.31269/triplec.v14i1.730>
- Korteling, J. E. (Hans., van de Boer-Visschedijk, G. C., Blankendaal, R. A. M., Boonekamp, R. C., & Eikelboom, A. R. (2021). Human- versus Artificial Intelligence. *Frontiers in Artificial Intelligence*, 4. <https://doi.org/10.3389/frai.2021.622364>
- Lim, W. M. (2024). What is qualitative research? An overview and guidelines. *Australasian Marketing Journal*, 14413582241264620.
- Madhini, I. T., Rohmah, N. N., Saudi, Y., Ishanan, I., Rahmawati, E., & Fathurrijal, F. (2024). Penerapan Kecerdasan Buatan (AI) dalam Produksi Konten Penyiaran: Peluang dan Tantangan. *Seminar Nasional Paedagogia*, 4(1), 612-620.

- Maurya, M., Puranik, V. G., Senthil Kumar, A., & Subramanian, B. (2023). Introduction to artificial intelligence. In *Toward Artificial General Intelligence: Deep Learning, Neural Networks, Generative AI*. <https://doi.org/10.1515/9783111323749-001>
- Miles, M. B., Huberman, M. A., & Saldana, J. (2014). Qualitative Data Analysis A methods Sourcebook Edition 3 (Terjemahan Tjetjep Rohindi Rohidi). In *Sage Publications, Inc.*
- Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48. <https://doi.org/10.26458/jedep.v7i1.571>
- Moloeng, L. J. (2015). *Metodologi Penelitian Kualitatif*. Remaja rosda karya.
- Oyedokun, I. (2023). *Effects of adopting Artificial Intelligence Presenters in Broadcasting on Audience Perception and Gratification of Broadcast Content*. August.
- Rogers, E. M. (1986). Communication Technology: The New Media in Society. In *Communication Technology and Society*.
- Roso, P. (2020). Membangun Media Penyiaran yang Berdaulat. *Jurnal Ekonomi, Sosial & Humaniora*, 1(09), 41-47.
- Rostamian, S., & Moradi Kamreh, M. (2024). AI in Broadcast Media Management: Opportunities and Challenges. *AI and Tech in Behavioral and Social Sciences*, 2(3), 21-28. <https://doi.org/10.61838/kman.aitech.2.3.3>
- Salam, R., Sinurat, M., Yasin, A., & Sapiro, R. (2023). Implementation of Artificial Intelligence in Governance: Potentials and Challenges. *International Journal Publishing INFLUENCE: International Journal of Science Review*, 5(1), 2023. <https://influence-journal.net/index.php/influence/index>
- Siebert, F., Peterson, T., & Schramm, W. (1956). *Four theories of the press: The authoritarian, libertarian, social responsibility, and Soviet communist concepts of what the press should be and do* (Vol. 10). University of Illinois press.
- Šola, H. M., Qureshi, F. H., & Khawaja, S. (2024). Predicting Behaviour Patterns in Online and PDF Magazines with AI Eye-Tracking. In *Behavioral Sciences* (Vol. 14, Issue 8). <https://doi.org/10.3390/bs14080677>
- Steelman, Z. R., Hammer, B. I., & Limayem, M. (2014). Data collection in the digital age. *MIS Quarterly*, 38(2).
- Syifa, M., Kadavi, P. R., & Lee, C. W. (2019). An artificial intelligence application for post-earthquake damage mapping in Palu, central Sulawesi, Indonesia. *Sensors (Switzerland)*, 19(3). <https://doi.org/10.3390/s19030542>
- van Assen, M., Muscogiuri, E., Tessarin, G., & De Cecco, C. N. (2022). *Artificial Intelligence: A Century-Old Story*. https://doi.org/10.1007/978-3-030-92087-6_1
- Vasiljeva, T., Shaikhulina, S., & Kreslins, K. (2017). Cloud Computing: Business Perspectives, Benefits and Challenges for Small and Medium Enterprises (Case of Latvia). *Procedia Engineering*, 178. <https://doi.org/10.1016/j.proeng.2017.01.087>
- Windarto, A. P., Dewi, L. S., & Hartama, D. (2017). Implementation of Artificial Intelligence in Predicting the Value of Indonesian Oil and Gas Exports With BP Algorithm. *International Journal of Recent Trends in Engineering and Research*, 3(11). <https://doi.org/10.23883/ijrter.2017.3484.j5bbs>
- Zhang, C., & Lu, Y. (2021). Study on artificial intelligence: The state of the art and future prospects. *Journal of Industrial Information Integration*, 23. <https://doi.org/10.1016/j.jii.2021.100224>
- Zhang, Z., & Li, J. (2023). A Review of Artificial Intelligence in Embedded Systems. In *Micromachines* (Vol. 14, Issue 5). <https://doi.org/10.3390/mi14050897>
- Zuboff, S. (2023). The Age of Surveillance Capitalism. In *Social Theory Re-Wired*. <https://doi.org/10.4324/9781003320609-27>