



Use of Artificial Intelligence Technology AI News Presenter in the News Production Process at TVOne.ai

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ABSTRACT

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The rapid pace of digital technology today is marked by the massive development of artificial intelligence technology, including the utilization of artificial intelligence technology in the news production process. This research examines the application of artificial intelligence (AI) in the news production process carried out by TVOne.ai. The research method used in this study was descriptive qualitative, conducted using a grounded theory approach with a focus on analyzing the application of artificial intelligence technology in the news production process, specifically the utilization of AI news presenters. This study uses a grounded theory approach to examine the integration of AI news presenters in TVOne.ai news production. The findings indicate that news production entirely uses AI technology, from data collection to presentation, offering efficiency but posing challenges related to ethics and public acceptance. In addition, the research findings reveal that the news production process at TVOne.ai differs from conventional journalism practices. News is produced entirely using AI technology and applications, from data collection, voice cloning, to the presentation of AI presenters. The study concludes that the use of Artificial Intelligence technology, specifically the AI news presenter at TVOne.ai, enhances the efficiency and consistency of the news production process. AI presenters enable faster content delivery, reduce operational costs, and ensure 24-hour broadcasting capabilities. However, human oversight remains essential to maintain journalistic accuracy, ethical standards, and audience trust the results of this research are expected to contribute knowledge about the news production process with the utilization of AI, both for academics, researchers, and media practitioners.

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1. Introduction

As a technology to study the behavior law of human intelligence, artificial intelligence (AI) constructs artificial systems with certain intelligence ability to complete the work that can only be qualified by human intelligence in the past, and it has been applied to many fields, including journalism (Wang, 2022). The development of artificial intelligence (AI) technology and applications is now increasingly widespread. AI technology is now used to assist with text



processing and photos, graphics, audio, and video. Content creators and other parties utilize AI technology for promotions, product advertising, and other purposes. Since the concept of artificial intelligence was introduced in 1956, AI technology has been gradually applied in various fields, including journalism (Xue et al., 2022). Furthermore, the media industry, including journalism, utilizes AI technology.

TVOne.ai is a platform owned by TVOne Media, which claims to be the first artificial intelligence (AI)-based media in Indonesia. It first launched news with AI presenters Sasha and Nadira on April 21, 2023, coinciding with Kartini Day. As a pioneering AI media in Indonesia, TVOne wants to promote female broadcasters after Sasha and Nadira, followed by Bhoomi. The three AI presenters represent the three 'original' presenters from TVOne: Sasya representing Syahda Yustiza, Nadira representing Fahda Indi, a presenter who wears a hijab, and Bhoomi representing Tiara Harahap. The voices used by the AI presenters are cloned from the original presenters' voices, but the visuals use AI, as shown in Fig. 1.



Fig. 1. AI Broadcasters and TVOne Real Broadcasters

News featuring AI presenters on TVOne is published via Instagram @tvone.ai. As of March 29, 2024, at 1:45 PM, news publications featuring AI presenters reached 1,500 posts. In addition to Nadira, Sasha, and Bhoomi, other AI presenters on TVOne include Kiko, Anya, Yudhistira, Rania, Roni, Rahul, Andini, Glenn, Devano, and Indy, as shown in Fig. 2.



Fig. 2. News Posts with AI Presenters on Instagram @tvone.ai

The number of followers on Instagram @tvone.ai as of March 29, 2024, at 1:45 PM was 13,600. The convergence of news publications with AI presenters has also been implemented. In addition to Instagram, news is uploaded to YouTube and Threads, which can be accessed at linktr.ee/tvone.ai and from the Instagram profile. This study emphasizes the growing significance of Artificial Intelligence (AI) in transforming the modern news production landscape. As seen in Fig. 3, By examining the use of AI news presenters at TVOne.ai, the research highlights how automation and machine learning technologies redefine traditional broadcasting practices. The focus is placed

on understanding how AI contributes to improving efficiency, consistency, and innovation in news delivery, while also addressing the challenges of maintaining journalistic integrity and audience trust. Ultimately, this paper underscores the need for a balanced integration of human expertise and AI capability to ensure that technological advancement aligns with the ethical and communicative values of journalism.

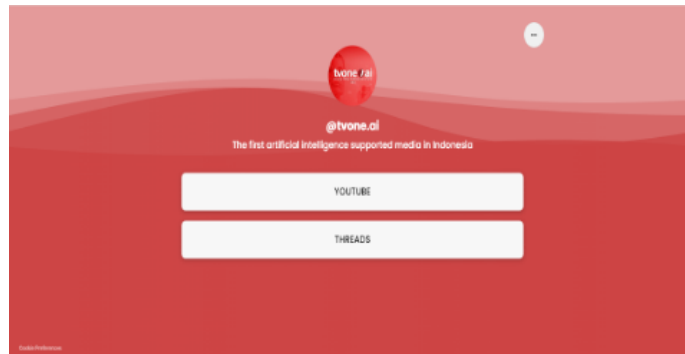


Fig. 3. YouTube Media and Threads for News Publishing with AI Presenter

The presence of AI presenters is considered a positive innovation in journalism because it is considered more efficient, and this is a new phenomenon in journalism. Previous research on artificial intelligence was conducted by [Ridwan & Heikal \(2023\)](#), focusing on understanding the application of artificial intelligence, or AI, in television industry management strategies with a case study at TVOne. The opportunities presented by AI for the television industry are in content production. The opportunity to implement AI technology at TVOne, through the integration of AI in content production, is aimed at improving the efficiency and quality of production programs by utilizing more sophisticated data analysis and automation. Furthermore, the challenge of implementing AI in the television industry is resources. The challenge of implementing AI technology at TVOne is in terms of the human and physical resources required, which include the necessary technical expertise and the availability of financial resources. The television industry has undergone many transformations due to continuous technological advances.

The study further shows that one of the technological innovations that has had a significant impact on this sector is artificial intelligence (AI) ([Ramadhan et al., 2024](#)). The study aimed to understand the utilization of artificial intelligence (AI) in the television industry's management strategy, using a case study of TVOne. Qualitative methods were used in the survey to gain insight and describe the prevailing conditions in the research environment ([Sarifah & Setio Utomo, 2024](#)). The research informants consisted of five participants from TVOne's top management. The analysis began with the coding stage of data obtained from transcribed interviews using a grounded theory approach. The study's conclusions highlighted that AI presents significant opportunities for the television industry, particularly in content production ([Ramadhan et al., 2025](#)). The prospect of implementing AI technology at TVOne, by integrating AI into content production, is aimed at improving the efficiency and quality of program production by utilizing more sophisticated data analysis and automation techniques. However, challenges faced in implementing AI in the television industry primarily revolve around resources ([Fajri et al., 2025](#)). Obstacles to implementing AI technology at TVOne relate to the availability of human and physical resources, including the necessary technical expertise, adequate financial resources, and appropriate infrastructure ([Faza & Deslia, 2024](#)).

The following study, "Strategy for Building a Positive Image Using Artificial Intelligence (AI) Technology for TVOne News," states that using AI technology in broadcasting news is a strategy for TVOne television to shape a positive public impression based on viewer trust in its news programs. AI technology is believed to help speed up work, analyze, and refine information. This understanding is expected to gain public support and trust, creating a positive image for the organization ([Sudinta et al., 2024](#)).

There is also research on TVOne's editorial ethical policy in using AI avatars as newscasters. The use of AI in broadcasting news is considered non-plagiaristic. All journalistic products are processed and obtained by real journalists. There is no plagiarism, and it does not violate the journalistic code of ethics, Article 12, because the artificial intelligence presenter @tvone.ai only conveys journalistic products created by journalists who carry out journalistic duties by referring to the journalistic code of ethics and Law Number 40 of 1999 concerning the Press ([Hermana et al., 2025](#)).

Another study entitled The Influence of Artificial Intelligence Presenter on the Interest of Television Presenter Profession (Case Study of KPI Semester V Students of UIN KHAS Jember) used a quantitative research method with a survey approach. With a research sample of 100 students of the Islamic Communication and Broadcasting Study Program (KPI) semester V of UIN KHAS Jember from a total population of 132 students, sampling based on the random sampling method, in addition, the researcher also used the Slovin formula with a 5% margin of error to determine the number of samples used. The data collection technique used in this study was a questionnaire. Pearson's simple regression analysis was used in this study's data analysis ([Wiesner et al., 2025](#)). The results of this study indicate that AI presenters influence on the interest of the TV presenter profession in KPI semester V students of UIN KHAS Jember, with a value based on the t value: the calculated t value of $5.735 > t \text{ table } 1.987$ so it can be concluded that variable X affects variable Y, so it can be explained that H_a is accepted and H_0 is rejected ([Yusuf & Cahyo, 2023](#)).

Xu and Ruan's 2023 study found that AI broadcasters were more effective in engaging consumers with high levels of social overload, while human broadcasters outperformed AI broadcasters among consumers with low levels of social overload ([Xu & Ruan, 2023](#)). Enjoyment, arousal, and dominance, three mediators whose effects vary on consumers' levels of social overload, collectively explain these differences ([Xu & Ruan, 2023](#)). These findings offer valuable insights into strategies for engaging consumers with varying levels of social overload through different types of broadcasters in the live streaming trade ([Xu & Ruan, 2023](#)).

The difference in this research is that it focuses on the stages of the production process and the AI technology used until the news is published. In addition, it aims to determine the effectiveness of the production process and the weaknesses and strengths of news production using AI technology. The novelty of this research is expected to contribute knowledge of the stages of the news production process using AI technology, the tools used, so that it can be used for scientific development in related courses, especially vocational schools, so that they will be better prepared to work in the broadcasting world that utilizes AI technology.

The term AI, or artificial intelligence, was introduced by John McCarthy in [Hamori & Kume \(2018\)](#) in 1956 at an academic conference. AI is used to describe intelligent machines that mimic human creativity and knowledge. AI is a field of computer science that focuses on creating intelligent machines that work and react like humans, encompassing speech recognition, learning, planning, and problem-solving ([Kulkarni & Satapathy, 2020](#)). Artificial intelligence (AI) is the effort to model human thought processes and design machines to mimic human behavior. In the media,

AI is revolutionizing how content is created, delivered, and consumed. AI technology can replace humans as news presenters (Kevin-Alerechi et al., 2025; Luttrell, 2025).

In journalism, AI has been utilized as a tool in news production. The presence of AI helps the work of journalists in the newsroom Hansen et al., (2017) which includes; 1) AI can help in fact-checking, which is doing work that escapes the attention of journalists as an example of identification due to the scale and complexity of the data; 2) AI with its enormous computing capabilities can help identify trends, namely identifying and characterizing data sets, 3) Examining the application of AI or computing as the subject of the story itself.

AI can communicate with humans through conversations, social robots, and automated writing devices. This technology is based on advances in the AI subfields of Natural Language Processing (NLP) and Natural Language Generation (NLG). NLP and NLG have interrelated goals: processing human communication well enough to enable machines to understand and generate messages presented in human language Allen in (Guzman & Lewis, 2020).

In journalism, NLP and NLG build computing systems that generate reports and text in numbers, words, images, videos, and narratives. The AI system works by analyzing data obtained through the AI algorithm process. Then, NLP obtains relevant information about the non-linguistic data, producing textual summaries and explanations of the data that help people understand and benefit from it Allen in (Guzman & Lewis, 2020). Automated news production is a complex amalgamation of data availability, data analyzing techniques, data-driven critiques, and intelligent automation (Zhang et al., 2023).

Artificial intelligence (AI) has integrated into human life and brought many innovations and conveniences (Aydın & İnce, 2024). AI in the journalistic process, especially in automated news writing, uses algorithmic logic carried out by Computer-Assisted Reporting (CAR). The latest concept was developed by Eirik Stavelin, who explains software-based journalistic practices that cover five areas: precision journalism, Computer Assisted Reporting (CAR), data journalism, database journalism, data-driven journalism, and computational journalism (Indainanto, 2020). The primary focus in this case is on CAR, which can change media routines. CAR is a form of computer-assisted news reporting referring to everything that uses computers to assist in the news gathering process (Stavelin, 2014). This means that computers can play a role in obtaining information from digital activities by using keywords in searches using algorithms from random and structured data. All processes are carried out automatically and form text narratives that humans can identify (Indainanto, 2020).

The self-learning capabilities of AI Machine Learning (ML) programming enable automated practices in news production, a process that can be repeated. ML learns pattern recognition, extracts patterns from data, and makes decisions based on the identified patterns. Machine learning aims to create models that generalize rules or data patterns so that we can use them to obtain information or make decisions (Putra, 2020). ML applications include speech recognition or natural language processing, image processing such as face detection, DNA sequence classification, financial analysis, sports predictions, and search engine algorithms (Essinger & Rosen, 2011).

AI technology in journalism must adhere to journalistic ethics and codes of conduct. The code of ethics serves as the moral foundation for the journalism profession. It serves as a guideline or principle, guiding journalists on what to do and avoid when carrying out their journalistic duties (Zainuddin, 2011). On the other hand, discussing the development of AI technology requires considering the aspect of social morality. The presence of AI technology poses serious challenges to the essence of "humanity" itself. Humans are defined not simply by their biological presence but by the complexity of their thinking. Self-awareness drives humans, often not based on rationality, as

their decisions may result from emotional processes involving feelings and the heart (Li, 2021). The difference between machines and humans is that while machines use logical cognitive processes, humans undergo complex processes involving cognitive aspects, emotions, motivations, identity, and social relationships to reach a decision (Ponciano et al., 2014).

The issue of morality based on dominant conceptions of humanity about the development of AI technology is indeed very complex. This is especially true when morality has multiple meanings and is often relative, raising various questions about whose moral standards will be used. Nevertheless, despite the ambiguity in morality, it remains crucial to ensure that future AI development adheres to specific moral standards, to ensure that AI will not eliminate humanity's essence, individual freedom and agency, or erode the responsibility of humans as its creators. Developing moral AI can begin with strengthening regulations on its development. This aims to ensure that humans as users receive adequate legal protection. Strengthening these regulations is also crucial to ensure that AI is exploited for the economic interests of certain groups and to truly achieve its stated vision of "AI for Good, AI for All." Although the focus of this research does not delve into the aspect of social morality, it is necessary to provide a foundation for understanding (Sarifah & Setio Utomo, 2024).

The rapid development of Artificial Intelligence (AI) has significantly influenced various industries, including journalism, where AI is increasingly used to automate news production and presentation. This technological advancement has created a new phenomenon in broadcasting, AI news presenters raising questions about how these systems transform journalistic practices and production workflows. Previous studies have generally focused on the use of AI in content generation or media automation, yet limited research has examined how AI technologies are integrated into the full news production process, particularly in the Indonesian context. This study addresses that gap by analyzing the implementation of AI news presenters at TVOne.ai as a model of AI-based news production. Unlike descriptive studies that merely report the presence of AI, this research critically examines the operational stages, technological mechanisms, and implications for media professionalism and efficiency. The novelty of this research lies in its analytical approach to understanding how AI reshapes production roles and workflows in television journalism. The study aims to contribute to academic discourse and vocational education by offering insights into AI-driven production models, thereby preparing future broadcasters to adapt to the evolving media landscape.

The diagram illustrates the conceptual framework of how Artificial Intelligence (AI) technology is integrated into the news production process. It begins with AI technology as the central driver influencing various aspects of journalism. From this foundation, the framework divides into three main areas: the news production process with AI presenters, the online media news production process using AI, and the implementation of AI usage standard operating procedures (SOPs) in online media. The first area focuses on how AI presenters are utilized in delivering news, including the tools used and an evaluation of the effectiveness, strengths, and weaknesses of AI-based news production. The second area highlights the use of AI in online media for searching, processing, and visualizing data, demonstrating how these technologies enhance efficiency and accuracy in journalistic workflows. The third area explains how online media implement AI SOPs, discussing both the advantages and disadvantages of standardizing AI use in newsrooms. All these components converge in the final concept, the utilization of AI technology in journalistic work processes which emphasizes how AI reshapes production models, work patterns, and professional roles within contemporary journalism as seen in Fig. 4.

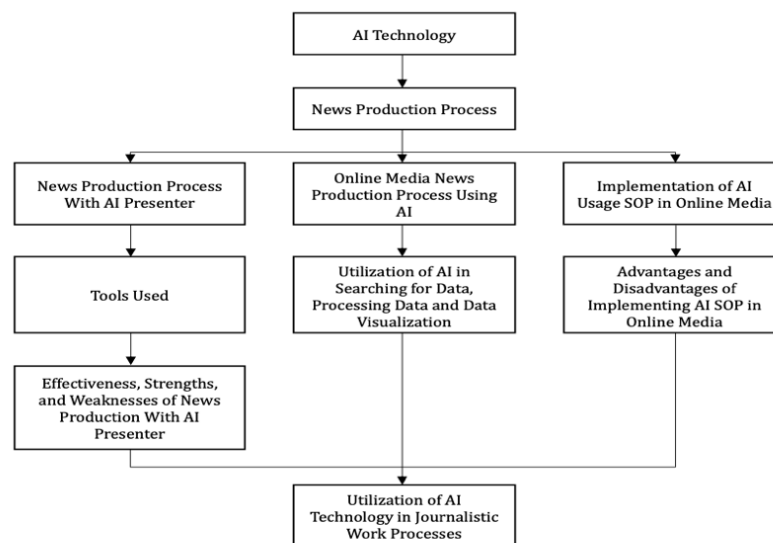


Fig. 4. Research Framework

2. Method

This study aimed to understand the use of AI technology for news presenters in the news production process at TVOne. The research method used in this study was descriptive qualitative with a grounded theory approach. Grounded theory research seeks to understand the collected data's meaning and significance (Parker & Roffey, 1997). Glaser & Strauss (1967) defined grounded theory as discovering theory from data, ensuring that the resulting theory is grounded in the studied phenomenon (B. Glaser & Strauss, 2017). Furthermore, Corbin & Strauss (2008) stated that grounded theory represents a theoretical construct derived from qualitative analysis. This approach reflects the same basic methodological principle: theoretical interpretation of data-generated phenomena using core methodologies.

The four steps in grounded theory are: 1) Concepts are derived from interviews, observations, and reflections; 2) Data are organized into categories representing themes; 3) As theories develop, they are developed and interconnected, and two or more theories are identified; 4) The final step involves constructing a research hypothesis statement or concept map (Corbin & Strauss, 2021).

This research examines the phenomenon of technological developments in broadcasting and television journalism, a current hot topic: AI. The research examines the use of AI presenter technology in the news production process with AI presenters at TVOne. It also identifies a model of the news production process using AI presenters and the tools used, the effectiveness of news production, and the advantages and disadvantages of AI presenters at TVOne. The purpose of this research is to identify and identify a model for the use of AI technology in news presenters at TVOne, specifically in the news production process and the AI technology used by TVOne news presenters.

The data collection technique in this study was carried out through observation and in-depth interviews related to the news production process with AI presenters on TVOne station, the tools used, the effectiveness of news production, and the advantages and disadvantages of AI presenters on TVOne station. In addition, documentation is also collected and found based on documentation, both archives and audio-visual documents, used as data sources in the study to conduct evaluations, interpretations, and predictions. Secondary data is also needed as references, for example, literature studies, books, news reports, or other archives related to this research.

Qualitative data analysis requires researchers to simultaneously collect data, interpret, and write research reports (Creswell & Creswell, 2018). Therefore, data analysis is not conducted separately from data collection but is a collaborative process. During data collection, researchers interactively engage in three components of analysis: data reduction, data presentation, and conclusions or verification (Sutopo, 2002). This study employs two methodological approaches as outlined by Creswell & Creswell (2018) and Sutopo (2002), as both frameworks share a strong methodological continuity and complement each other in understanding qualitative research processes. The integration of these two approaches allows this study to combine Creswell's structured design with Sutopo's dynamic and contextualized analysis, ensuring both methodological rigor and cultural relevance. This combination supports a comprehensive exploration of AI technology use in the news production process, particularly the phenomenon of AI news presenters at TVOne.ai, through in-depth, context-sensitive interpretation (Sutopo, 2016).

The data in this study were analyzed qualitatively. Qualitative research is a procedure that produces descriptive data in the form of written or spoken words from people or observed behavior (Moleong, 2018). In this study, the research objects included the news production process with AI presenters at TVOne, the human resources involved in the production process, and the technology used and how it was used. The research subjects were four people namely Apni Jaya Putra as AI Media Development, Merdi Sofansyah as Senior AI Media Content Production, Dini Melina Yudi as Junior AI Media Content Production and Hasanudin Ahmad as Digital Media Strategist

The research was conducted by observing @tvone.ai through social media platforms like Instagram and YouTube. Direct observations were conducted at the @tvOne.ai office at Wisma Bakrie, Jalan Rasuna Said Kav. B1, South Jakarta. Interviews were conducted with four AI management and production team members at @tvone.ai. Observations were conducted in the newsroom during the production process.

3. Result and Discussion

@tvone.ai is a media under TVOne media that focuses on developing a digital platform that utilizes artificial intelligence to produce news and information content. @tvone.ai is the latest innovation in journalism, where AI technology assists in the news creation process. @tvone.ai is a pioneering media company using AI in content production, including journalism, especially in the Asia and Indonesia regions. @tvone.ai has successfully integrated artificial intelligence technology in daily news production. More than a year since the first news was published with an AI presenter on April 21, 2023, @tvone.ai presents daily news with an AI presenter.

The production team for @tvone.ai is small, consisting of only four people, unlike the television news production team required at TVOne. These four individuals contribute significantly to the news production process, ensuring effective and efficient reporting. The four production teams within @tvone.ai are:

1. AI Media Development, led by Apni Jaya Putra, who serves as lead management and editor-in-chief of the @tvone.ai news production team. He also serves as part of the news and content production team for @tvone.ai's news.
2. Senior AI Media Content Production, Merdi Sofansyah, is the content production team for news on the @tvone.ai Instagram platform, YouTube channel, and other platforms. Merdi Sofansyah has a background in journalism.
3. Junior AI Media Content Production, led by Dini Melina Yudi, is the content production team for news on the @tvone.ai Instagram platform, YouTube channel, and other platforms.

4. Digital Media Strategist, namely Hasanudin Ahmad, is a team member focusing on strategic digital media and social media analysis.

New Media Development @tvone.ai

The rapid development of technology, especially AI technology, is the basis for the importance of TVOne in developing @tvone.ai. Apni Jaya Putra said, "Currently, the media ecosystem has changed. People get information from social media. The way they get information is also different. Therefore, we must understand the ecosystem." Apni Jaya Putra conveyed this during an interview at the @tvone.ai office on August 19, 2024. Apni said, "Digital platforms have excellent opportunities now and in the future, to develop medicine and business, including the use of AI in content production."

AI presenter @tvone.ai broadcasts via the social media network Instagram @tvone.ai and YouTube on the @tvone.ai channel and on television in the programs 'Apa Kabar Indonesia Malam' and 'Kabar Siang TVOne'. This makes TVOne the first TV station in Indonesia to use AI presenters to deliver various types of news. Thus, @tvone.ai has proven that AI technology can be a driving force in innovation in the media industry and provide a more meaningful viewing experience for audiences.

The Instagram platform was chosen as the medium for publishing news content with AI presenters because it is the most widely used media by people in Indonesia. However, for complete news, it is still published using the YouTube platform @tvone.ai. For one year, news with AI presenters was uploaded through the Instagram platform as an effort to introduce the @tvone.ai media and AI news presenters to the public, according to Apni Jaya Putra, "The journey of @tvone.ai began on Instagram to introduce the concept of AI to the public, then expanded to YouTube." After its success on Instagram and YouTube, the TikTok platform is now an important part of TVOne's strategy to reach the younger generation, who are more familiar with short and engaging content formats. According to a 2023 Pew Research Center study, Generation Z spends more time on TikTok than on other platforms. Therefore, @tvone.ai has adapted its content to meet the preferences of a younger audience, such as the use of attractive visual effects and short narratives.

To optimize performance on each platform, @tvone.ai has collaborated with consultants with expertise in social media. One example of @tvone.ai's in-depth analysis of social media platform algorithms is the transformation of Instagram content into a carousel to increase user engagement. By directing users to YouTube via a linktree, @tvone.ai hopes to increase viewership and advertising revenue. @tvone.ai has developed advanced AI technology. This technology has cloned presenters' original voices, including the president's, with English subtitles. Furthermore, AI is used to alter presenters' clothing and hairstyles, design studios and lighting, and perform voiceovers and sentiment analysis. To ensure transparency, @tvone.ai always includes a disclaimer that the content generated is AI-generated.

@tvone.ai has several news publication platforms, including a news portal, a YouTube channel, and social media. The news portal at <https://www.tvone.ai> presents news in text-based articles, chat-based summaries of several articles, and videos. @tvone.ai's current social media platforms for news publication are:

1. Instagram, owned by @tvone.ai, where news content published includes photos, videos, and infographics with captions. The content is created in the form of carousels and reels. It currently has 12,700 followers as of August 28, 2024.
2. X, with the handle @tvoneAI, is used as a platform to promote video content on YouTube. X @tvoneAI has 24 followers as of August 28, 2024.

3. TikTok, with the handle @tvOneAi, with the profile 'The First Artificial Intelligence-Supported News Channel In Indonesia.' The TikTok channel @tvOneAi has 5,869 followers and 172,900 likes as of August 28, 2024.
4. YouTube channel @tvone.ai, a platform for broadcasting the latest news and various important events. In addition to presenting news videos on various topics, this channel hosts live broadcasts of various national events, such as the President of the Republic of Indonesia's state address, national holiday celebrations, and presidential debates. By integrating AI technology into its news presentation, @tvone.ai offers viewers a more interactive and informative viewing experience. The YouTube homepage features a video about TVOne, presenting the latest information in an AI format, the first in Indonesia. The @tvone.ai YouTube channel had 9,590 subscribers as of August 28, 2024.
5. News Portal www.tvone.ai, a portal 100% AI-generated. The launch of the @tvone.ai news portal was carried out on May 20, 2024. This news portal was launched to present news for readers, news lovers with limited time, and readers who want to know the news concisely.

News Production Process

Just four people handle news content creation for all platforms. News production at @tvone.ai involves comprehensive steps, from thorough planning and efficient production to detailed post-production. However, managing social media differs due to the need for trend research. The news production workflow at @tvone.ai begins with:

1. Collecting and analyzing trend data from social media platforms and current news events. Hasanudin Ahmad, the Digital Media Strategist, conducts trend analysis. Trend analysis primarily utilizes Search Engine Optimization techniques, keyword analysis, and social media and news monitoring.
2. The trend analysis data identifies news topics, which are then used for meetings and discussions with the entire Production Team. Afterward, the necessary data is sourced from the TVOne team, part of tvonenews.com. The @tvone.ai team does not cover news events on-site; video and data are obtained through access to TVOne's databases and those of subscribed news agencies.
3. Determine the news topic to be produced and the appropriate content format.
4. Data searches are also conducted using AI if necessary, using appropriate prompts. Data and images are still filtered and validated by the Production Team.
5. News script writing also utilizes AI, but AI only serves as an aid. The script still undergoes an editing process by the Production Team, usually carried out by Merdi Sofansyah and Apni Jaya Putra, as both have senior journalism backgrounds.
6. The script is then turned into a news story with a narrative read by an AI presenter. This narrative is generated by the AI presenter and a voice cloned from the original presenter.
7. News stories posted to Instagram are prepared with captions suitable for Instagram, as are those for other platforms.
8. Before publication, a gatekeeping process is still carried out to verify the news and content quality.

"The use of AI in the production process is positioned as an aid; control remains under humans. So, humans control AI," according to Merdi Sofansyah. In news production with the use of AI, @tvone.ai has a brief guideline that is used. Apni Jaya Putra said, "Speaking about the ethics of using AI, currently there are no clear regulations in Indonesia, but a brief guide is still available at @tvone.ai." The guideline includes transparency, ethics and security, quality and accuracy, responsible use, reader engagement and education, and legal compliance.

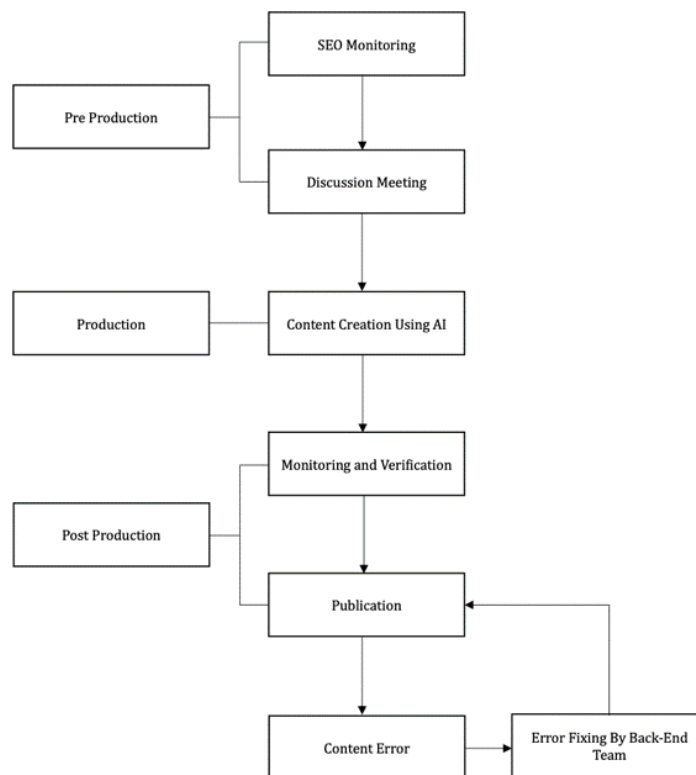


Fig. 5. TVOne AI News Production Process Model

As seen in Fig. 5, the diagram illustrates the workflow of the AI-based news production process, divided into three main phases, pre-production, production, and post-production, that collectively describe how Artificial Intelligence (AI) is integrated into journalistic content creation and management. Each phase includes specific activities designed to ensure both the technical quality and editorial integrity of the news output. In the pre-production phase, the process begins with SEO monitoring, which involves analyzing trending topics, audience search behavior, and relevant keywords to guide news content planning. This stage ensures that the news content produced aligns with audience interests and enhances visibility in digital platforms. Following this, a discussion meeting takes place where editorial and technical teams collaborate to determine news angles, story structure, and appropriate AI tools to be used for content creation (Sarifah & Setio Utomo, 2024).

The production phase centers on content creation using AI, where AI systems are employed to generate scripts, visual elements, and, in some cases, automated news presentation. This phase demonstrates the practical application of AI technologies in accelerating content generation and reducing human workload, while maintaining coherence and factual accuracy. In the post-production phase, the process transitions to monitoring and verification, where both human editors and automated systems review the AI-generated content for accuracy, clarity, and compliance with editorial standards. Once approved, the news content proceeds to publication across digital or broadcast platforms. However, if any content errors are identified post-publication, they are flagged and sent to the back-end team for error fixing, ensuring continuous quality control and improvement of the AI-driven production system. Overall, this structured workflow illustrates a hybrid model of news production that integrates AI capabilities with human editorial oversight. It

reflects the evolving nature of journalism in the digital era, where technological efficiency and human judgment coexist to maintain credibility, speed, and audience engagement in the news production process.

AI Tools Used

@tvone.ai has integrated various cutting-edge AI technologies to support the creative process and content production. By utilizing models such as Stable Diffusion and ChatGPT, as well as developing internal applications for fine-tuning, @tvone.ai can generate various types of content automatically and efficiently. Here are some of the AI techniques used by @tvone.ai:

1. Image Generative, which uses the Stable Diffusion model to generate unique and creative images based on text descriptions.
2. Text Generative, which utilizes ChatGPT as a basis for generating text, but with fine-tuning adjustments using company- or industry-specific data. To ensure relevant and accurate output, this fine-tuning process is done through @tvone.ai's internal applications.
3. SEO, which uses data analysis to optimize content for search engine discovery.
4. LLM (Large Language Model), which is widely applied, from text generation and video to text-to-audio conversion.
5. Suno AI is a special technology developed to produce music.

Production Effectiveness

@tvone.ai has identified significant potential in leveraging AI to improve operational efficiency and content production quality. Research findings indicate that TVOne is focusing on integrating AI into the production process, from audience data collection to content distribution, aiming to produce more relevant and engaging content for audiences.

AI has made the video editing process more efficient. Previously time-consuming editing processes can now be completed in just 30 seconds with AI. This significantly increases productivity and allows the team to produce more content in a shorter time. Furthermore, using AI presenters has also optimized production costs, as evidenced by the production team's size of only four people. Merdi Sofansyah said, "All content for @tvone.ai's various platforms is produced in this small room with a small team, yet we can produce much content." Apni further added, "We do not have a TV studio, but we can produce in an AI TV studio. These days, we do not need a large studio for news production; everything can be done with AI."

Advantages and Disadvantages of AI Presenter

TVOne has adopted AI presenter technology for a dual purpose. First, the visual appeal of programs should be enhanced by presenting more dynamic and interactive data. However, the use of AI in this context is still in the development stage and has not yet been fully integrated into all programs. Second, AI presenters are used to support commercial activities, such as product or service promotions. The advantage of AI presenters in this context is their ability to convey promotional messages without being bound by the neutrality rules that apply to human presenters, thus providing greater flexibility in content design. The advantages of AI for news presenters and news production are undoubtedly more effective and efficient.

The use of AI presenters also has disadvantages, including market acceptance of AI presenters. While this technology offers enormous potential to revolutionize the media industry, a lack of public understanding is a significant obstacle. Intensive and ongoing education is key to building trust and encouraging adoption of this technology. Apni Jaya Putra stated that by concretely demonstrating

how AI presenters can improve efficiency, creativity, and personalize content, we can create stable demand and drive sustainable market growth.

Meanwhile, netizen comments on news posts featuring AI presenters on Instagram @tvone.ai show that many have accepted the presence of AI presenters. The comments are not about the AI presenters but rather the topics or discussions presented in the news. This means that many people have accepted the presence of AI presenters as newsreaders.

The findings of this study are consistent with previous research emphasizing the transformative role of Artificial Intelligence (AI) in the media and journalism industries. [Ridwan & Heikal \(2023\)](#) found that the implementation of AI in television content production enhances efficiency and quality through automation and advanced data analysis, an observation that aligns with the results of this study, which demonstrate how @tvone.ai can manage news production effectively with a small team of only four people. This reinforces the argument that AI-driven automation can significantly optimize production workflows and reduce operational costs while maintaining journalistic quality.

Similarly, [Sudinta et al., \(2024\)](#) highlighted that AI adoption in broadcasting is a strategic step to build a positive public image and increase audience trust. The case of @tvone.ai confirms this, as netizen responses on social media platforms show a positive reception toward AI presenters. This acceptance indicates that the public's perception is shifting toward recognizing AI as a legitimate and credible part of journalistic presentation.

The findings also support [Hansen et al., \(2017\)](#) and [Guzman & Lewis \(2020\)](#), who argue that AI functions not only as a tool for efficiency but also as a cognitive partner capable of assisting journalistic tasks such as fact-checking, data analysis, and content personalization. The integration of SEO, LLM, and generative AI tools at @tvone.ai illustrates this partnership between human editorial judgment and AI computational capacity. In this context, the concept of hybrid journalism, where human creativity and machine intelligence coexist, becomes increasingly relevant.

From a theoretical perspective, this study's results resonate with Computer-Assisted Reporting (CAR) theory proposed by [Stavelin \(2014\)](#) and developed by [Indainanto, 2020](#)). The use of automated systems to collect, analyze, and present data at @tvone.ai exemplifies CAR's evolution into computational journalism, where algorithmic logic replaces manual newsroom routines. Furthermore, the grounded theory approach used in this research demonstrates how these technological practices form new production norms that redefine the role of journalists as supervisors of machine-generated narratives rather than sole content creators.

In terms of ethical implications, the findings affirm the arguments of [Hermana et al., \(2025\)](#) that the use of AI avatars as news presenters does not violate journalistic ethics as long as transparency and accuracy are maintained. @tvone.ai's commitment to displaying disclaimers on AI-generated content exemplifies responsible AI use in accordance with journalistic moral standards. This is also consistent with [Zainuddin \(2011\)](#) principle that journalism ethics function as the moral foundation of media credibility.

Overall, this study contributes to the theoretical understanding of how AI reshapes the socio-technical system of journalism, bridging the gap between human-centered media practices and algorithmic production models. The integration of AI at @tvone.ai demonstrates that efficiency, innovation, and ethics can coexist when guided by clear editorial oversight and ethical frameworks. This supports the ongoing discourse on "AI for Good" and positions @tvone.ai as a model for sustainable and ethical AI implementation in Southeast Asian journalism.

4. Conclusion

This study concludes that the integration of Artificial Intelligence (AI) technology, particularly through AI presenters at @tvone.ai, has transformed the news production model in Indonesia's media landscape. The findings reveal that AI utilization enhances efficiency, scalability, and content innovation while enabling more personalized and interactive audience experiences. The small but effective production team demonstrates that automation can optimize workflows, reduce costs, and maintain editorial quality through hybrid collaboration between humans and machines. Nevertheless, challenges persist, especially regarding natural language processing accuracy, public acceptance, and data security, which require continuous technological refinement and ethical oversight.

Theoretically, this research reinforces the concept of hybrid journalism and supports prior studies emphasizing AI's potential to improve productivity and innovation in media production. However, it also highlights the necessity of maintaining human control to safeguard journalistic integrity. Future research should expand to cross-organizational and longitudinal analyses to assess AI's long-term implications on newsroom structures, employment patterns, and audience trust. Moreover, quantitative evaluation of production efficiency and engagement outcomes is essential to deepen understanding of AI's transformative role in contemporary journalism.

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References

- Aydın, B., & İnce, M. (2024). Can Artificial Intelligence Write News: A Research On Determining The Effect Of Artificial Intelligence On News Writing Practice. *Intermedia International E-Journal*, 11(20), 24–41. <https://doi.org/10.56133/intermedia.1436647>
- Corbin, J., & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory,(3e ed.) sage. In *Thousand Oaks, California*.
- Corbin, J., & Strauss, A. (2021). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory—SAGE Research Methods*.
- Creswell, J. W., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches - John W. Creswell, J. David Creswell - Google Books. In *SAGE Publications, Inc.*
- Essinger, S. D., & Rosen, G. L. (2011). An introduction to machine learning for students in secondary education. *2011 Digital Signal Processing and Signal Processing Education Meeting*. <https://ieeexplore.ieee.org/abstract/document/5739219/>
- Fajri, C., Sari, N., Karim Fathurrahman, I., Najih Farihanto, M., & Fadillah, D. (2025). Artificial intelligence-based risk communication for traveller protection in Indonesia. *COMMICAST*, 6(1), 159–173. <https://doi.org/10.12928/commicast.v6i1.14442>

- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: strategies for qualitative research (grounded theory). In *Taylor & Francis eBooks DRM Free Collection*. Routledge.
- Glaser, B., & Strauss, A. (2017). *Discovery of grounded theory: Strategies for qualitative research*. taylorfrancis.com. <https://doi.org/10.4324/9780203793206>
- Guzman, A. L., & Lewis, S. C. (2020). Artificial intelligence and communication: A Human–Machine Communication research agenda. *New Media & Society*, 22(1), 70–86. <https://doi.org/10.1177/1461444819858691>
- Hamori, S., & Kume, T. (2018). Artificial intelligence and economic growth. In *Advances in Decision Sciences* (Vol. 22). <https://doi.org/10.7208/chicago/9780226613475.003.0009>
- Hansen, M., Roca-Sales, M., Keegan, J. M., & King, G. (2017). *Artificial intelligence: Practice and implications for journalism*. academiccommons.columbia.edu. <https://doi.org/10.7916/D8X92PRD>
- Hermana, G. Y., Fakhruroji, M., & Maarif, A. A. (2025). Penggunaan Artificial Intelligence pada Praktik Jurnalistik di Media TVONE. *Annaba: Jurnal Ilmu Jurnalistik*, 10(1), 23–42. <https://doi.org/10.15575/annaba.v10i1.43430>
- Hilmy Rizqullah Ramadhan, M., Ramadhani, K., Isrok, M., Anggraeny, I., & Prasetyo, R. (2024). Legal Protection of Personal Data in Artificial Intelligence for Legal Protection Viewed From Legal Certainty Aspect. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v8i21.14710>
- Ikmalina Faza, F., & Fikrani Deslia, I. (2024). Digital Marketing of Purbayan Tourism Village Yogyakarta Through Instagram @kamwispurbayan in Facing Competition of Tourism Destinations. *COMMICAST*, 5(2 SE-Articles), 40–60. <https://doi.org/10.12928/commicast.v5i2.11501>
- Indainanto, Y. I. (2020). *Artificial Intelligence dalam Rutinitas Media Online*. eprints.undip.ac.id. <https://eprints.undip.ac.id/82286/>
- Kevin-Alerechi, E., Abutu, I., Oladunni, O., & Osanyinro, E. (2025). AI and the newsroom: Transforming journalism with intelligent systems. In *Journal of Artificial Intelligence Machine Learning and Data Science*. urfjournals.org. <https://urfjournals.org/open-access/ai-and-the-newsroom-transforming-journalism-with-intelligent-systems.pdf>
- Kulkarni, A. J., & Satapathy, S. C. (2020). *Optimization in machine learning and applications*. Springer. <https://doi.org/10.1007/978-981-15-0994-0>
- Lexy J. Moleong. (2018). *Metodelogi Penelitian Kualitatif* (Revisi-C). PT Remaja Rosdakarya.
- Li, C. (2021). The Artificial Intelligence Challenge and the End of Humanity. In *Intelligence and Wisdom* (pp. 33–48). Springer Nature Singapore. https://doi.org/10.1007/978-981-16-2309-7_3
- Luttrell, R. (2025). *Social media: How to engage, share, and connect*. books.google.com. https://books.google.com/books?hl=en&lr=&id=poZ4EQAAQBAJ&oi=fnd&pg=PT5&dq=in+the+media+ai+is+revolutionizing+how+content+is+created+delivered+and+consumed+ai+technology+can+replace+humans+as+news+presenters&ots=ZUmlYd83qL&sig=g9efMRzR1kGgJNA4_ZwOpfi_Dmw
- Parker, L. D., & Roffey, B. H. (1997). Methodological themes. *Accounting, Auditing & Accountability Journal*, 10(2), 212–247. <https://doi.org/10.1108/09513579710166730>
- Ponciano, L., Brasileiro, F., Andrade, N., & Sampaio, L. (2014). Considering human aspects on strategies for designing and managing distributed human computation. *Journal of Internet*

- Services and Applications*, 5(1), 10. <https://doi.org/10.1186/s13174-014-0010-4>
- Putra, J. W. G. (2020). *Pengenalan Konsep Pembelajaran Mesin dan Deep Learning Edisi 1.3*. In *Tokyo: self-published-work*.
- Ramadhan, M. H., Hidayat, D. R., & Yudhapramesti, P. (2025). Mapping Television ownership concentration in West Java after the Analog Switch-Off. In *COMMICAST*. 6(1), 35-48. <https://doi.org/10.12928/commicast.v6i1.12719>
- Ridwan, D., & Heikal, J. (2023). Application Of Artificial Intelligence (Ai) In Television Industry Management Strategy Using Grounded Theory Analysis: A Case Study ON TVONE. *Jurnal Pendidikan Indonesia*, 4(9), 922–930. <https://doi.org/10.59141/japendi.v4i9.2196>
- Sarifah, S., & Setio Utomo, A. (2024). Creativity of program producer ‘Inside Indonesia’ CNN Jakarta. *COMMICAST*, 5(1), 107–118. <https://doi.org/10.12928/commicast.v5i1.10285>
- Stavelin, E. (2014). *Computational Journalism. When journalism meets programming*. bora.uib.no. <https://bora.uib.no/bora-xmlui/handle/1956/7926>
- Sudinta, H., Hasan, B. M., & Kuswoyo, E. (2024). Strategi Membangun Citra Positif Dengan Teknologi Artificial Intelegence (AI) Untuk Siaran Berita Tvone. *Jurnal Esensi Komunikasi Daruna*. <http://esensijournal.com/index.php/daruna/article/view/83>
- Sutopo, H. B. (2002). *Pengantar Metodologi Penelitian Kualitatif Cet I*. Surakarta. UNS Press.
- Sutopo, H. B. (2016). Metodologi penelitian kualitatif: Dasar teori dan aplikasi. In *Universitas Sebelas Maret Press*.
- Wang, S. (2022). *Research on the Application of Artificial Intelligence Technology in News Space's Production* (pp. 90–98). https://doi.org/10.1007/978-3-030-99616-1_13
- Wiesner, A., Schäfer, S., & Lecheler, S. (2025). Navigating the gray areas of content moderation: Professional moderators’ perspectives on uncivil user comments and the role of (AI-based) technological tools. *New Media & Society*. <https://doi.org/10.1177/14614448231190901>
- Xu, Y., & Ruan, Y. (2023). AI and human broadcasters: Relative impact on consumer engagement in live streaming commerce. *Electronic Commerce Research and Applications*, 62, 101335. <https://doi.org/10.1016/j.elerap.2023.101335>
- Xue, K., Li, Y., & Jin, H. (2022). What Do You Think of AI? Research on the Influence of AI News Anchor Image on Watching Intention. *Behavioral Sciences*, 12(11), 465. <https://doi.org/10.3390/bs12110465>
- Yusuf, K. Z., & Cahyo, F. D. (2023). Pengaruh Presenter Artificial Intelligence terhadap Minat Profesi Presenter Televisi. *Icon: Islamic Communication and Contemporary Media Studies*. <https://icon.uinkhas.ac.id/index.php/icon/article/view/22>
- Zainuddin, H. M. (2011). The journalist: Bacaan wajib wartawan, redaktur, editor & para mahasiswa jurnalistik. In *Bandung: Simbiosis Rekatama Media*.
- Zhang, W., Pérez Tornero, J. M., & Tian, Q. (2023). Dissecting Automated News Production From a Transdisciplinary Perspective: Methodology, Linguistic Application, and Narrative Genres. *Sage Open*, 13(4). <https://doi.org/10.1177/21582440231206372>