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Artificial Intelligence (AI) News Anchors: How Do They Perform in the Journalistic Sector?

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ABSTRACT

This library research reviews the Artificial Intelligence (AI) news anchors in journalism. The analysis shows that the rise of AI news anchors/newsreaders marked a milestone in journalism. However, at the same time, it also sparked discussion and concern. In April 2023, tvOne, one of Indonesia's private television stations, introduced several AI news anchors named Sasya, Nadira, and Bhoomi. Several news agencies and media in various countries have previously demonstrated innovation with AI newsreaders, such as China, South Korea, Russia, Kuwait, and India. The appearances of male and female AI newsreaders are presented to resemble the human appearance and given data that can be read using text-to-speech technology. The emergence of AI anchors has presented traditional announcers and presenters with new opportunities and challenges. Therefore, it is necessary to confront the formidable obstacles that AI anchors present to human presenters. AI's application to the AI news anchor allows AI technologies to give a synthesized voice and digitally manipulated visage based on developer-supplied content. However, AI technology is still immature, and its adoption in the media faces numerous obstacles. Future AI news anchor trends may include interactive broadcasting and effective news anchors. Various jobs may present robots with AI. AI may be able to replace the work of human journalists and even replace humans as news presenters. However, we need to understand that AI is not a substitute for humans; it is a tool that can help improve human performance.

1. INTRODUCTION

The development of information and communication technologies (ICTs) has caused significant shifts in the news media industries. Moreover, the emergence of artificial intelligence (AI) and machine learning has recast the implications of technologies across numerous domains (Biswal & Gouda, 2020). With the advent of new computers, graphics, and hardware technologies, the virtual world has become a reality (Fernández-Caramés & Fraga-Lamas, 2022). AI or Artificial Intelligence is created by humans through computer machines (Fitria, 2023). AI can learn and perform certain tasks on its own, without human intervention. AI technologies for refining and optimizing work become more pervasive, they are entering fields with organizational logic that conflict with the efficiency logic of automation.

In recent years, as a result of significant and rapid advancements in the field of artificial intelligence (AI), there has been a rise in interest in and use of intelligent applications across many disciplines (Fitria, 2021a, 2021b). Since the introduction of the concept of artificial intelligence in 1956, AI technology has been progressively implemented in a variety of disciplines, including journalism (Xue et al., 2022). We are rapidly approaching a time when machines (robots) will perform tasks previously performed by humans, and even do them better and quicker (Guanah et al., 2020). This era would be dominated by Artificial Intelligence (AI), also known as machine intelligence, as machines take the lead in virtually every field of human endeavor. We are already living in an era where AI aids human abilities in the execution and accomplishment of various tasks. AI is utilized in daily existence. AI is a reality for journalism. Similarly to other fundamental aspects of our existence, AI has permeated journalism. Multiple reputable news organizations have implemented AI to perform a variety of newsroom tasks. As anticipated, audiovisual production is not an exception, but the production process, facial recognition, text, and sound, as well as video editing, have undergone radical transformations thanks to a set of tools that rely on AI technologies, as a support to the human element, especially in time-consuming and repetitive tasks (Fayq et al., 2022).

Journalism is one such industry, as it is defined by a logic enacted through professional norms, practices, and values (Sirén-Heikel et al., 2023). IT technologies and artificial intelligence (AI) create new opportunities for numerous scientific disciplines, including journalism (Popkova & Ostrovskaya, 2021). In today's digital world, journalism is powered by a variety of technologies (Dhiman, 2023). As a result of the recent enthusiasm surrounding AI, many researchers have discussed its potential to transform journalism and other forms of knowledge work (Lin & Lewis, 2022). AI with generative capabilities is heralding a period of the potential transformation of journalism (Pavlik, 2023). AI has benefited journalism as machines perform journalistic tasks and generate results rapidly for broadcast and print media (Okiyi & Nsude, 2019).

Long and Wu (2021) state that technology that is based on AI plays a significant part in the evolution and expansion of the broadcasting and television business. Artificial intelligence (AI) is gradually being integrated into previously non-AI-based processes (Zhang & Tornero, 2021). Since television's introduction to journalistic practice more than half a century ago, there has been an ongoing conflict between the journalistic community and its established norms, procedures, and ideals, and the unique features that television has contributed to journalistic practice (Meltzer, 2010). This statement added by Hu et al. (2021) that in radio and television media, AI voice technology can play an important role; it can improve the productivity and quality of traditional audio work, optimize the singing system, broadcasting system, and retrieval system, and therefore enhance the quality of service provided to the general public. Concerns among those who work in related fields are growing in tandem with the increasing use of AI in broadcast hosting. The sensitivity of the field of journalism to worldwide breakthroughs in the design of algorithms that gradually replicate the behavior and reactions of the human brain will be the root cause of the influence that artificial intelligence will have on journalism (Túñez-López et al., 2021). The changes became apparent when the automation of the final product (news) or its staging (bots that present or retransmit) was achieved; however, they affected the entire process of managing the news media, as well as the conception, production, dissemination, and consumption of its products, which include entertainment as well as news.

AI technologies are regarded as the added value of journalism in the digital era, particularly for their ability to overcome the fundamental challenges of modern journalism, such as combating fake news, news editing according to editorial policy, and content personalization (Ali & Hassoun, 2019). The study also discovered that the use of artificial intelligence in journalism raises professional and ethical concerns, including the following: stifling creativity, the absence of monitoring, bias, lack of transparency, unfairness, data utilization, and data quality. It also concluded that artificial intelligence technologies will enhance journalists' work rather than supplant them. Therefore, artificial intelligence poses no threat to the profession of journalism.

Presently, the emergence of AI anchors has presented traditional announcers and presenters with new opportunities and challenges. The advent of AI anchors has altered the definition of a presenter. Therefore, it is necessary to confront the formidable obstacles that AI anchors present to hosts or presenters (Xiao & Duan, 2021). According to Xie (2022), the birth of the world's first artificial intelligence (AI) anchor in 2018 provided new opportunities for the development of the media industry, but also brought concerns to the pertinent practitioners, as the AI anchor has reached the level of falsity, whether from the voice or expression. It is progressively transforming the traditional media landscape and people's traditional understanding of media. The combination of artificial intelligence and the media industry has introduced revolutionary changes to traditional industries in the era of intelligent media. In recent years, the emergence of AI-generated anchors has affected the broadcasting and hosting industry (Qi, 2021).

The advent of AI and automated technology has significantly altered the journalistic profession, transforming the methods for capturing, processing, generating, and disseminating information; and enhancing the work of journalists by modifying the routines and expertise required of information professionals (Tejedor & Vila, 2021). Maad et al. (2007) state that in many developed and developing nations, technological advancement has reshaped the news media landscape over the past two decades. Various facets of news production and dissemination are transforming as a result of the introduction of automated artificial intelligence processes, particularly in economies with a large population base. The Chinese news media has a high level of acceptance for artificial intelligence and has developed innovative new products, such as an AI-powered simulated anchor, which will grow swiftly in the future due to policy and market pressures in the news industry (Wang, 2021).

Munoriyarwa et al. (2021) assessed AI incorporation and how journalists and editors see its usage in news creation. In-depth interviews with journalists and editors addressed these two key goals. Their findings show that South African traditional newsrooms were gradually, diversely, and methodically adopting AI approaches. These newsrooms had three AI apps. Comprehensive AI adoption comes first. Task-specific and exclusive technical exploitation of AI follows. AI is being widely used despite scepticism. The fear of job losses, the expense of adopting AI, the lack of training, the ethical difficulties surrounding AI, and the democratic efficacy of AI drive pessimism.

There are several previous studies related to AI news anchors or AI TV newscasters. Xue et al. (2022) focused on research addressing AI news anchors and utilized two correlated studies to study the perceived attractiveness of AI news anchors from a psychological aspect, as viewed by audiences. This was done to determine

whether or not AI news anchors can compete with human news anchors in terms of perceived beauty. The variables that impacted the behavioral inclination of AI news anchor viewers were the focus of Study 1, and the variables that mediated and mitigated psychological changes in audiences were the subject of Study 2. Both studies were conducted by the same researchers. According to the data, audiences found non-humanoid female AI newscasters with anthropomorphic languages to be the most seductive. Kim et al. (2022) explored how consumers viewed an artificial intelligence newscaster in comparison to a human newscaster. People believed that a human newscaster was more trustworthy than a newscaster that was generated by AI; yet, people's information-seeking and behavioral intents were not affected by the type of newscaster they watched. In the case that human resources were scarce, this exploratory research raised the prospect that artificial intelligence (AI) newscasters may be included in the news broadcasting sector. Sun et al. (2022) investigated the Chinese public's current knowledge, feelings, concerns, preferences, and expectations regarding AI in the journalism industry. The public was found to be familiar with the use of AI technology in media and journalism, with the description of AI-powered news products being the most familiar aspect. The majority of the public responded positively to the news broadcast by AI-simulated anchors. The public believed that the implementation of AI had a greater impact on the format than on the content of news reports. In the future production of news, the majority of the public believes that AI mode and conventional mode should coexist. Zhang (2023) explained that in the past decade, AI has been a driving force in technological advancement, spawning a new surge of technology led by China and the United States, whose development momentums were substantial but distinct. To comprehend the future trajectory of AI development, it is crucial to comprehend the current attitudes and tendencies of Chinese social media towards AI. There are numerous applications of artificial intelligence technology, including the media. The advent of 5G and the emergence of AI commentators have had a significant impact on the media industry. AI newscasters have become feasible due to technological advancements (Kim et al. 2022). Some news stations around the globe have already implemented AI to convey the news, and this trend may continue. The job of the news presenter (news anchor) is to speak and deliver a certain program to the public or audience following the script and rundown that has been made by the producer and the creative team. The presenter itself is very important in an event program because it is the presenter who delivers the program from start to finish (Andani, 2020).

The Industrial 5.0 era is characterized by technological advancements that are believed to facilitate human existence, including the performance of duties, such as in the media business and news reporting (Hastjarjo et al., 2021). Beijing's Xinhua news agency introduced the first artificially intelligent virtual newscaster in November 2018. It was created to mimic the appearance, intonation, facial expression, and gestures of a genuine male Chinese news anchor. Even, one of the private television stations in Indonesia, tvOne, suddenly became a trending topic on social media, Twitter. It turns out that tvOne made a change by using an Artificial Intelligence (AI) presenter. This AI presenter was introduced by tvOne on Friday 21 April 2023. tvOne also has an Instagram account @tvOne.ai. They claim to be the first television station to use an AI presenter. The AI presenter technology introduced by tvOne is a very interesting example of applying AI in television journalism. The researcher is interested to know more about virtual TV presenters or AI news anchors. Therefore, the objective of this study is to review Artificial Intelligence (AI) news anchor in the journalistic sector.

2. METHOD

This research used library research. According to Khatibah (2011), library research is a series of activities related to data acquisition methods literature, perusing and recording, and processing library materials. These activities are inextricable from the library's print and electronic media collections, as well as library-related documents. The research literature can locate the data in the collections. In the search for theory, researchers will collect as much information as possible from related literature (Evanirosa et al., 2022).

Documentation was used to collect the data. Library research is a study in which documents, such as manuscripts, books, newspapers, and periodicals, serve as the primary data source. With the advancement of technology, the definition of a library has expanded to include digital documents in addition to printed ones (Sugiarti et al., 2020). In this research, the researcher used printed documents such as journal articles and books. Besides, the researcher also used digital documents from social media such as Instagram and YouTube related to the topic of AI news anchors. In analyzing the data, the researcher used content analysis. Content analysis or content evaluation is a research methodology that employs a set of procedures for deriving valid conclusions from a book or document. This is a comprehensive analysis of the content of any written or printed material. From the preceding explanation, it can be deduced that content analysis is a method of research involving specific steps to extract the essence of something's ideas and information, from which conclusions are derived.

3. FINDINGS AND DISCUSSION

3.1. Findings

This study reviews Artificial Intelligence (AI) news anchor in the journalistic sector. Several news agencies and media in various countries have previously demonstrated innovation with AI newsreaders such as China, South Korea, Kuwait, India, Russia, and even Indonesia. The appearances of male and female AI newsreaders are presented to resemble the human appearance and given data that can be read using text-to-speech technology. The rise of AI anchors marked a milestone in journalism. Some call it the new era of news broadcasting. However, at the same time, it also sparked discussion and sparked concern. As we know, AI technology is starting to be able to replace the work of human journalists. Artificial intelligence is intelligence added by humans to a technological system. Various jobs can now be represented by robots with AI 'Artificial Intelligence'. AI technology can now even replace humans as news presenters.

3.1.1. AI TV Presenter in Indonesia

tVOne is for the first time a TV station in Indonesia that uses presenters with artificial intelligence technology, aka artificial intelligence (AI) as news presenters. This AI-tech news presenter was first introduced by tvOne on Friday, April 21, 2023, right on the commemoration of Kartini Day. Through this latest breakthrough, tvOne claims that they have become the first AI-based media in Indonesia.

Figure 1
tvOne AI Introducing AI News Presenter/AI News Anchor

Source: https://www.youtube.com/@tvOneNews

Figure 2
tvOne AI News Presenter/News Anchor in Indonesia

Source: https://www.instagram.com/tvOne.ai/

tvOne, the first AI-supported media in Indonesia (@tvOnenews). "This time, tvOne comes with its latest breakthrough by becoming the first AI-based media in Indonesia," wrote tvOne on Instagram @tvOnenews. Not only that, tvOne has even created an Instagram account @tvOne.ai specifically for their AI presenters since they were first introduced. In his upload, one of the news television stations introduced three beautiful AI presenters named Sasya, Nadira, and Bhoomi. Sasya has the characteristic of long, shoulder-length hair with a lighter skin tone, and Nadira wears a neat hijab with tanned skin. Meanwhile, Bhoomi, who was just introduced on Tuesday, April 25, 2023, has tan skin with a jet-black curly shoulder-length hairstyle. With the presence of the AI presenters, several responses from netizens emerged, as taken from social media on Instagram and YouTube can be seen in Excerpts 1 and 2.

Excerpt 1

Netizens' Responses on Instagram

@klik_fakta *Inovasi tiada henti, tanya neh apakah nanti presenter TvOne yang kece-kece akan digantikan AI?* (Innovation is endless, just asking if the fancy TvOne presenter will be replaced by AI?
@dickyrinaldo *Saya mengucapkan selamat kepada TvOne atas terobosan yang luar biasa dengan menjadi pelopor media AI pertama di Indonesia. Langkah ini tidak hanya membuka peluang untuk peningkatan kualitas pemberitaan, tetapi juga menunjukkan bahwa TvOne selalu berinovasi untuk memberikan pengalaman terbaik bagi pemirsa. Semoga kesuksesan TvOne di bidang AI dapat menginspirasi media lainnya untuk terus berinovasi dan memberikan layanan terbaik bagi masyarakat* (I congratulate TvOne for the great breakthrough by becoming the first AI media pioneer in Indonesia. The move not only opens up opportunities for improved news quality, but also shows that TvOne is always innovating to provide viewers with the best experience. May TvOne's success in AI inspire other media to keep innovating and provide the best service to the community).
@tvprogram.id *Wah sebuah inovasi dalam pertelevisian nih. Selamat TvOne* (Wow an innovation in television. Congratulations TvOne)
@toko.smc *Nanti akan ada, semua teks di dunia maya, bisa dibacakan. Jadi baca koran digital, tapi dibacakan, kita hanya mendengarkan (*Later there will be, all text in cyberspace, readable. So read the digital newspaper, but read, we just listen).
@hilwaysluvu S*udah ada AI nih, masih menunggu tvOne di tv digital berkualitas HD* (There is already AI, still waiting for tvOne in HD digital TV).
@stevenora_ *Positifnya semakin naiknya perkembangan teknologi* (The positive is the increasing technology development)
@dzikri_fauzan11 *Semoga lebih di perhatikan lagi terkait gestur tubuh biar lebih luwes di lihatnya, keren* (Hopefully more attention to body gestures so it will be more visible, cool)
@msmutiarapertiwi *Good job. Tapi suaranya jangan di dubbing. Kurang cocok sama karakternya tone suaranya. Jatohnya kayak avatar aja jadinya ga bukan AI* (Good job. But don't dub the voice. It doesn't match the character and the tone of the voice. The fall just like avatar so it's not AI).
@qadri.ig *Saya rasa ini sudah sangat sempurna menurut ku yg dikatakan hasil Ai. Keren bngt semoga di Indonesia update terus perkembangan teknologi dan mengimplementasikan, Seperti tvOne yg awere tentang itu semua* (I think this is already perfect according to me said the result of Ai. Very cool hopefully in Indonesia continue to update technology development and implement, Like tvOne who is awere about it all)
@bayuanugerah13 *Keren sih, tinggal percepatan kalimat, sehingga tidak terkesan seperti mengeja atau membaca pewara AI nya. Good job TvOne* (This is cool, just the acceleration of the sentence, so it's not as impressive as spelling or reading his AI. Good job TvOne)
@syahrul_m17 *Semoga terus berkembang, dan menjadikan teknologi Indonesia semakin bersinar* (Hopefully it will continue to grow, and make Indonesian technology shine even more)
@cepgun97 *Saran aja nih, kan tvOne ai ini pake resolusi 16:9 HD, sedangkan pengambil materi dilapangan apalagi ke tv masih dibuat 4:3, dari pada nanti kepotong mending daripusatnya upgrade perangkatnya biar balance gitu. Siapa tau juga konten ini ikut tayang juga ke siaran tv* (Just a suggestion, tvOne ai uses a resolution of 16:9 HD, while capturing material in the field, especially on TV, is still made at 4:3, instead of cutting it later, it's better if the center upgrades the device so that it's in balance. Who knows, this content will also be broadcast on TV broadcasts)
@andreyasbw *News anchor idolaku beralih ke sosok virtual* (My favorite news anchor has turned virtual)

Source: www.instagram.com/tvOne.ai/

Excerpt 2

Netizens' Responses on YouTube

@SANDANG TV *Titik awal persaingan teknologi terbaru di TV telah dimulai oleh TvOne. Selamat, TvOne. Maju terus pertelevisian Indonesia (*The starting point for the latest technology competition in TV has started with TvOne. Congratulations, TvOne. Go ahead Indonesian television)
@Ians453 *Alangkah baiknya selain menjadi pelopor media AI pertama, siaran beritanya harus upgrade ke HD 16:9. Iklan yg ditayangkan tvOne mayoritas sudah 16:9 kok, tinggal upgrade aja teknologi 33imic33 di studio* (It would be nice that apart from being the first AI media pioneer, its newscasts should be upgraded to HD 16:9. Most of the commercials aired by tvOne are 16:9, all that's left is to upgrade the technology in the studio)
@Umi Syifa *Amazing, congrats tvOne sebagai Media berbasis AI pertama di Indonesia. Barusan nonton dari tv, langsung cari di YouTube. AI sehebat apapun, belum bisa 100% bisa mirip human sih, tapi ini terobosan baru dan patut kita apresiasi. Ke depannya saya yakin pasti akan lebih baik. Tetap semangat berkarya* (Amazing, congrats tvOne as the first AI-based media in Indonesia. Just watched it on tv, immediately searched for it on YouTube. No matter how great AI is, it can't be 100% human-like, but this is a new breakthrough and we should appreciate it. In the future I'm sure it will be better. Keep up the good work)
@Galih *Menurut saya, gerakannya bisa lebih di perhalus lagi, mungkin bisa menggunakan motion capture agar lebih halus 33imic33n nya,dan tadi yg pake hijab sponsoryngsong,mungkin bisa di perhalus lagi 33imic33n muka dan dirasakan* (In my opinion, the movements could be refined even more, maybe you can use motion capture to make the movements smoother, and earlier the one wearing the hijab had crooked lips, maybe the movements of his face and lips could be refined)
@Eka Nanda *Mukanya gak natural gitu. Mulut dan pengucapannya gak singkron. Tapi saya masih tetap salut dengan terobosan tvOne ini* (Her face isn't that natural. The mouth and pronunciation are not in sync. But I still salute this tvOne breakthrough)

@FrimariChandra *Kurang enak rasanya AI nya, kurang gress. Bahasanya , gesture dan kelancaran nya perlu di tingkatkan. Masih memang buatan Allah itu terbaik, AI hanya membantu* (The AI doesn't taste good, it's not gress enough. The language, gestures and fluency need to be improved. Still, God's creation is the best, AI only helps)
@ragirusan *Lahan pekerjaan presenter jadi terancam menurut saya* (In my opinion, the presenter's job field is threatened)
@sang_penutur S*ecanggih apapun teknologi yang berusaha meniru 34imic dan tingkah laku manusia,tetap bagian matalah yang membedakan bagian itulah akan terlihat apakah insan itu makhluk yang punya ruh atau cuman tiruan* (No matter how sophisticated the technology is that tries to imitate human expression and behavior, it is still the part of the eye that differentiates. That part will show whether a human is a creature with a spirit or just an imitation)

Source: www.youtube.com/@tvOneNews

Several responses on social media such as Instagram and YouTube, show that the responses of netizens or the public are varied, there are pros and cons to AI news anchors. Several people welcomed the development of information and technology regarding the existence of news anchors based on artificial intelligence. However, several people gave several suggestions regarding the goodness of future news anchors so that they look better and sound more natural.

3.1.2. AI News Anchor Debuts in China

At China's World Internet Conference, China's state-run news agency has just unveiled an anchor powered by artificial intelligence. China's official news agency, Xinhua, introduced its virtual newsreader using artificial intelligence (AI) technology. China's state-run Xinhua News Agency has introduced an AI) anchor, which they claim is the first in the world. "English AI Anchor" made its début Thursday at the World Internet Conference in the province of Zhejiang in eastern China. The news anchor is modeled after the agency's Zhang Zhao presenter and can work 24 hours a day. This AI presenter is claimed to be able to deliver news like a professional broadcaster. Xinhua is working with Sogou, a search engine company in China, to develop the system used to run this virtual anchor. An AI system is used to mix voice, lip movements, and expressions based on real Xinhua newsreaders. "Hello everyone, I am an artificial intelligence English anchor. This is my first day at Xinhua news agency. My voice and appearance resemble Zhang Zhao, the original anchor of Xinhua," the virtual anchor said in the opening of the video. Xinhua said these virtual newscasters could "work" 24 hours a day on websites and social media. This AI can bring news in two languages, namely English and Chinese. Technology has also enabled Xinhua to disseminate news reports on time. The many benefits that can be used to reduce the cost of news production.

Figure 3
AI News Presenter/News Anchor in China

Source: https://www.youtube.com/@CNBCtelevision

3.1.3. AI News Anchor Debuts South Korea

South Korean television channel MBN recently introduced its viewers to South Korea's first artificial intelligence (AI) news anchor. The AI imitates the human form of Kim Ju-ha, the media's regular presenter. Not only does he have the same look and voice as the popular presenter, but he also mimics the small gestures that Kim sometimes makes, such as fiddling with a pen while reporting the news. During the broadcast on November 6, 2020, the AI even shared a conversation with real-life Kim Ju-ha to compare their voices, which left many people dumbfounded. "I was created through deep learning from 10 hours of Kim Ju-ha's videos, learning the details of his voice, the way she talks, the facial expressions, the way her lips move, and the way she moves her body. I can report the news just like news anchor Kim Ju-ha does, " added the AI.

Figure 4
AI News Presenter/News Anchor in South Korea

Source: https://www.youtube.com/@cbsboston

3.1.4. AI News Anchor Debuts Kuwait

The Kuwaiti media outlet has launched a virtual newscaster generated using artificial intelligence (AI), with plans to read online newsletters. The first non-human broadcaster in Kuwait is named Fedha. She appeared on the Twitter account of the Kuwait News website on Saturday (8/4/2023) as an image of a woman, whose light-colored hair was uncovered, wearing a black jacket and white T-shirt. “I am Fedha, the first presenter in Kuwait working with artificial intelligence at Kuwait News. What kind of news do you like? Let’s hear your opinion,” she said in classical Arabic.

Figure 5
AI News Presenter/News Anchor in Kuwait

Source: https://www.youtube.com/wion

3.1.5. AI News Anchor Debuts in India

In India in early April 2023, India's national media group, India Today Group, also announced the presence of the first AI virtual news anchor. Appearing for the first time at the India Today Conclave 2023, the news presenter named Sana is visualized as a woman and can speak several languages, including the local one. This month, an Indian media company launched Sana, an AI news bot that delivers news updates multiple times each day, as its first full-time AI news anchor. The AI-powered reporter can be seen on the Aaj Tak news channel of the India Today Group. At a debut event where Indian Prime Minister Narendra Modi was present, the group's vice chairperson, Kalli Purie, praised the woman as "bright, gorgeous, ageless, and tireless." Sana resembles a human and receives data that can be read aloud by employing text-to-speech technology.

Figure 6
AI News Presenter/News Anchor in India

Source: https://www.youtube.com/@indiatoday

3.1.6. AI Weather Forecast Reader Debuts in Russia

One of the Russian TV stations, Svoye TV introduced their AI weather forecast reader named Snezhana Tumanova. Snoye TV introduced their AI presenter through their new 'Future Forecast' program last Tuesday and will be present five times a day. Svoye TV revealed that the program uses a neural network that is responsible for virtual presenters, preparing text, and generating graphic content. The 'Forecast the Future' program by Svoye TV in Russia is the latest example of applying neural networks to generate artificial presenters. Despite having an AI weather forecaster, Svoye TV clarified that they do plan to abandon real human presenters at this time.

Figure 7
AI News Presenter/News Anchor in Russia

Source: https://www.youtube.com/@user-vy8by2ru5k

3.2. Discussion

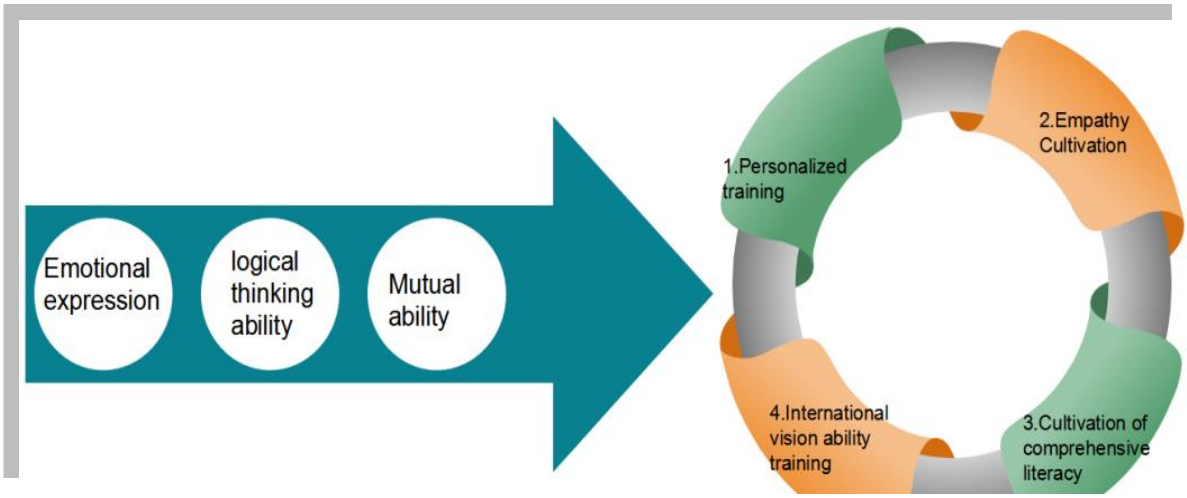
The emergence of intelligent media has also reshaped journalism (Zhang, 2023). The development of AI technology has also resulted in a modification to the news production process. Advanced AI writing machines and AI synthetic anchors at home and abroad are demonstrating to the industry that mass-produced, standardized content is destined to disappear. Journalists must find their own inventive, distinctive vantage points to delve deeper into the value of news so that humanity can distinguish itself from machines and find its position in the industry in the face of the personal threat posed by automation. Journalism may never be imagined that a robot or artificial intelligence could supplant a news anchor (Gelgel, 2020). The role of news anchors is to convey the news by analyzing it, making insightful remarks about the news, and providing more context in the news, as opposed to simply reading the news. ICT (information and communication technologies) have advanced as evidenced by the AI-news anchor. The use of sophisticated technologies has influenced all aspects of journalism, including production, distribution, and consumption, not just AI-powered news anchors. Al is also a popular search term for broadcast content, content production, and content management. Snackable video services, automated caption generation, topic-based profile enrichment, Al news anchors, the creation of new programs by mining archives, and even an automated studio system utilizing the power of Al that does not require camera personnel or an on-site director. The implementation of Al in agenda setting reduces expenses and increases revenues for both the media industry and its customers (Matos, 2021).

In the identical way that the development of AI affects various sectors of society, it also affects journalism practice in a variety of ways, particularly now that journalists can use AI-generated clever templates to easily collect and disseminate news reports on a variety of topics (Guanah et al., 2020). The expansion of the universe provides a more unified application space for new technologies and media, such as artificial intelligence, virtual reality, blockchain, and big data, and encourages the incremental improvement of traditional media. Artificial anchors are virtual intelligent media products. They are responsible for hosting and disseminating news reports on radio, television, and the Internet and have undergone a series of iterative processes, including TV anchors, virtual anchors of video websites, and Al synthetic anchors (Zhang, 2022). This is expected to produce better presentations and be more easily understood by the audience. Artificial Intelligence (AI) is a field of computer science devoted to solving cognitive problems commonly associated with human intelligence.

Several news agencies and media in various countries have previously demonstrated innovation with AI newsreaders such as China, South Korea, Kuwait, India, Russia, and even Indonesia. The appearances of male and female AI newsreaders are presented to resemble human appearance and given data that can be read using text-to-speech technology. These Al anchors enhance the appearance and structure of news broadcasts with their unique charisma and appearance. After that, local media closely followed the lead of national media and increased their investment in intelligent media products, such as anchors powered by artificial intelligence. People's familiarity with the human-computer interaction of virtual idols and virtual anchors is also conducive to the improvement of their acceptance of virtual digital assets, and they are willing to pay for virtual characters in the virtual world, such as purchasing concert tickets, etc. AI presenters can understand the content provided and present it in human language naturally.

Figure 8

Training Model of Live-Action Anchors in the Context of AI Anchors (Wang, 2021)



According to Wang (2021), based on the current state of technology, AI anchors can only convey the literal meaning of the text in the broadcast script and cannot convey the underlying meaning of the language and text. Secondly, AI anchors are unable to utilize them with a flexible tone, intonation, and pause. Audience members will have a strong sensation of mechanical hearing, diminishing the effectiveness of communication. Particularly in large-scale live broadcasts, AI anchors lack in-depth thinking and communication skills and cannot interact with the audience, whereas live anchors can overcome these obstacles through training and experience. Therefore, it is necessary to actively investigate a feasible training model and propose targeted training for broadcasting and hosting students' education against the backdrop of artificial intelligence. Focus on developing students' affective expression skills, interaction skills, logical reasoning skills, etc., and enhance their irreplaceability in the context of AI anchors.

It means, AI anchors can only transmit the literal meaning of broadcast script text, not the underlying language and text. AI anchors cannot employ them with a changeable tone, intonation, and pause. A mechanical hearing will reduce audience comprehension. AI anchors lack critical thinking and communication skills and cannot communicate with the audience, especially in large-scale live broadcasts. Live anchors can overcome these challenges with training and experience. Therefore, a practical training model and focused training for broadcasting and hosting students' education against the backdrop of artificial intelligence must be actively investigated. Improve pupils' emotive expressiveness, engagement, logical reasoning, and AI anchor irreplaceability.

Wang (2021) explains more about the benefits of AI anchors in terms of content production efficiency, broadcast accuracy, and visual novelty are readily apparent to all. However, audiences and users, as well as

researchers from a variety of disciplines, find the live-action anchors to be lacking in empathy and affinity. In addition to the philosophical significance and media professionalism, the concerns of academia and industry have also included the personification and interactivity of AI anchors. AI anchors are "better" than human anchors on the physical level, such as skills, but their lack of emotional expression, lack of logical thinking ability, and lack of interactive ability will hinder the effective application of this technology in the information dissemination field. In addition, the academic community and the business sector have paid considerable attention to the ethical issues raised by AI anchors.

With the advancement of artificial intelligence in the media industry, the traditional art of broadcasting and conducting faces enormous challenges in terms of instruction and application. Particularly, the introduction of synthetic anchors powered by artificial intelligence has had a profound effect on the presenter and announcer industry (Wang, 2021). Wang (2021) states that many practitioners are uncertain as to whether they will be supplanted by anchors powered by artificial intelligence. In addition to broadcasting error-free news and disseminating information in multiple languages, AI anchors can work uninterrupted 24 hours a day, 365 days a year, which significantly improves work efficiency. News anchors may encounter new competition due to the ability of AI anchors to imitate human facial expressions and broadcasting behaviors. From the perspective of the screen, the simulation level of the artificial intelligence anchor is nearly identical to that of a human. This unquestionably places those live-action announcers in jeopardy of extinction and necessitates new broadcasting and hosting instruction and training requirements. In light of AI anchors, it is crucial to investigate how to train competitive announcers and presenters.

In recent years, AI has been used frequently in broadcasting and hosting, attracting the attention of domestic and international media (Qi, 2021). The foundation of artificial intelligence is continually updated and refined, and it is progressively replacing a great deal of basic and highly repetitive tasks. Academic circles and the media industry are concerned that artificial intelligence anchors will supplant the broadcasting and conducting professions. The advancement of artificial intelligence also will have a significant effect on conventional broadcasting, particularly news programs. However, technological advancements do not only result in extinction; they also create opportunities and value. In the age of total media, the 5G interconnection of everything will further disrupt traditions, elevating the connection between people and the world to a physiological and psychological level, and spawning a new form of news media. Presenters of the news must keep up with the times, comprehend advanced technology, fortify themselves, increase their cultural literacy, and combine intellect with professionalism to advance professionally.

With the increasing influence of technology in all spheres of life comes the progressive assertion that broadcasters and presenters will be replaced by artificial intelligence (Niu & Weng, 2020). How to confront the challenge, break through a close encirclement, and ride the era express is of great importance, as is producing broadcasting and hosting art majors following national demands. Jia (2022) explains that AI may be used for smart lyrics, composition, distribution, translation, suggestion, deconstruction, and retrieval. AI-assisted television planning lets audiences choose news, provides them with more targeted news content through data capture and resource integration, meets audiences' comprehensive and in-depth information needs through a question-and-answer method, innovates dissemination logic and expression approaches, and improves audiences' experience and leadership in information acquisition. AI-assisted television transmission improves information delivery, news resource optimization, and audience receptivity.

AI is one of the current era's major development themes, and the broadcasting and hosting industries are also experiencing tremendous growth and change in the field of AI. AI anchormen can reconstruct the media ecology of the traditional broadcasting and hosting industry and introduce new opportunities to the television industry (Wang, 2023). They have unique development advantages. On the other hand, AI anchorman development disadvantages include functional and commercial flaws. To ensure their growth in the era of artificial intelligence, traditional hosts must modernize their businesses under the influence of technology. At the same time, they should be more receptive to artificial intelligence and actively collaborate with AI anchors to create a new industry structure.

Analyzes the challenges and opportunities confronting the broadcasting and hosting industry in the era of fusion media through the lens of an audience, presenter personality, and media discourse power. According to the research from Zhang (2021), with the advent of the era of integrated media, the broadcasting and hosting industries are confronted with the effects and challenges posed by the diversification of audience preferences, the lack of broadcasting and hosting personality, the transformation of media discourse power, and the rapid development of artificial intelligence. However, it also confronts the advantages and opportunities presented by a growing audience, expanding influence, direct communication effect, a highly literate audience, and the evolution of modern media technologies. Put forward the innovation of old broadcasting and hosting ideas and concepts, establish a personalized style of broadcasting and hosting, improve the business level of broadcasting and hosting, utilize new media technology innovation, and expand the media culture communication ability, among other broadcasting and hosting industry innovation and development countermeasures. In conclusion, the future development prospects of the broadcasting and hosting industries in the era of fusion media are examined.

AI technologies have swiftly permeated numerous spheres of human activity, inspiring awe with their ostensibly limitless potential and evoking apprehension regarding the looming threat of complete human labor replacement (Horska, 2020). AI demonstrated its complete potential in the media industry by delivering high-quality content, an unprecedented level of personalization, and effective audience engagement. AI has already arrived in journalism, and the media must decide whether to respond to the challenges and adapt to the new reality or combat "windmills" in an attempt to halt the impending progress of innovations and promote the model of journalism as a "people-to-people" activity. Li and Li (2022) explain that AI can nearly supplant humans in completing many time-consuming and laborious complex tasks, including the production, editing, filming, and even the performance of actors in brief videos. Even though they benefit humans, these potent functions have many disadvantages. We should continue to think rationally about them to improve the effectiveness of artificial intelligence technology in empowering creation.

However, the question returns to whether we should be afraid that our jobs will be taken over by AI. The answer is not absolute. Even though AI technology continues to develop rapidly, there are still many jobs that cannot be replaced by AI. Jobs that require empathy, creativity, and direct human interaction still require human presence. In addition, the use of AI also requires human support and supervision. AI still requires human input and supervision to ensure the quality and safety of the technology. Therefore, the use of AI should not replace human work but rather help and improve human performance. In the long term view, we do need to prepare ourselves for an era in which AI technology will advance and engage in work. However, this does not mean we should be afraid of losing our jobs. Instead, we must prepare ourselves by improving the skills and abilities that AI cannot replace.

Oshida (2021) states that some types of jobs that appear to be less likely substituted by Al technologies such as art director, indoor/outdoor instructor, announcer, interior coordinator, interior designer, film photographer, film director, graphic designer, game creator, speech auditor, industrial designer, advertising director, copywriter, lyricist, composer, magazine editor, scenario writer, product development staff, writer, display designer, TV photographers, TV talent, book editor, free writer, producer, broadcast reporter, broadcast director, record producer, recording engineer, etc. These jobs are directly or indirectly related to communication value, which is one of Al's typical weaknesses. It is anticipated that the value of skills and the capacity to perform tasks that cannot be automated by machines such as Al will increase more than ever.

The presence of AI with various increasingly sophisticated and creative innovations has a very significant influence in every line of life in the social, business, economic, health, and other fields. The implementation of AI in various sectors of life has a positive impact, AI can answer various problems with current conditions but on the other hand, AI is also a threat to human resources because many human jobs are slowly being replaced by AI. In the future the development of AI will be even more sophisticated, therefore people must continue to upgrade themselves to keep up with developments in science, especially in the field of technology, and create themselves as creatively as possible so that it is difficult to replace AI (Pakpahan, 2021). In essence, AI can indeed replace some human jobs, but AI will never be able to replace the emotional side of humans, therefore it is better for the world community, especially Indonesia, to continue to maintain and develop their emotional intelligence so that in the future their existence will still be needed, to live like true humans who have love and concern for others to improve life.

In conclusion, AI's application to the AI news anchor allows current AI technologies to give the AI anchor a synthesized voice and digitally manipulated visage based on developer-supplied content (Wang & Zhu, 2022). However, AI technology is still immature, and its adoption in the media faces numerous obstacles. Future AI news anchor trends will include interactive broadcasting and effective AI news anchors. The use of AI technology in various fields is very positive progress for mankind. However, we need to understand that AI is not a substitute for humans, but a tool that can help improve human performance. Therefore, we do not need to be afraid that our jobs will be taken over by AI, as long as we can prepare ourselves by improving skills and abilities that AI cannot replace.

4. CONCLUSION

Journalism never imagined that a robot or artificial intelligence could supplant a news anchor. The role of news anchors is to convey the news by analyzing it, making insightful remarks about the news, and providing more context in the news, as opposed to simply reading the news. The rise of the AI news anchor marked a milestone in journalism. Some call it the new era of news broadcasting. However, at the same time, it also sparked discussion and sparked concern. Not long ago, one of Indonesia's private television stations, TvOne, introduced two news anchors alias AI news anchors, named Sasya, Nadira, and Bhoomi. Several news agencies and media in various countries have previously demonstrated innovation with AI newsreaders such as China, South Korea, Russia, Kuwait, and India. The appearances of male and female AI newsreaders are presented to resemble the human appearance and given data that can be read using text-to-speech technology. As we know, AI is starting to be able to replace the work of human journalists. AI is intelligence added by humans to a technological system. AI machines can now be designed to read human emotional states. Various jobs can now be represented by robots

with AI 'Artificial Intelligence'. AI technology can now even replace humans as news presenters. However, we need to understand that AI is not a substitute for humans, but a tool that can help improve human performance.

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