

AI Anchors Redefining environmental Journalism: A Sentiment Analysis of Netizens

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Abstract: The emergence of AI news anchors is expected to significantly change the methods of news production, consumption, and perception. Alongside personalized avatars and AI-driven video creation, these advanced systems are likely to profoundly alter the news industry. These news anchors are advanced computer systems that closely resemble human beings in their functionality. They possess the capability to deliver news continuously, operating 24 hours a day and 365 days a year without experiencing fatigue or the need for rest. The contemporary landscape of journalism is characterized by the interaction between humans and machines, with artificial intelligence enhancing journalistic activities and enriching the narrative process. AI technology equips newsrooms to increase their output, allowing journalists to be liberated from monotonous tasks and concentrate on innovative research and investigative reporting. This study aims to discover the AI and its potential to cover environment reports. This research is an attempt to understand the changing dynamics of journalism with the use of artificial intelligence by using secondary data related to the concerned topic. Study discovers the changing trends in the field of media with advent of AI bringing attention to the news industry and their evolving presentations.

Keywords: Artificial Intelligence, Media, News, Democracy, Machine and media, Virtual news anchor credibility, Netizens.

INTRODUCTION

AI has increasingly been utilized in broadcasting and hosting, garnering significant interest from both domestic and international media outlets. A variety of positions exist for the development of media programs, including but not limited to art director, indoor and outdoor instructor, announcer, interior coordinator, interior designer, film photographer, film director, graphic designer, game developer, speech auditor, industrial designer, advertising director, copywriter, lyricist, composer, magazine editor, scriptwriter, product development personnel, writer, display designer, television photographer, television talent, book editor, freelance writer, producer, broadcast reporter, broadcast director, record producer, and recording engineer. The visual representations of male and female AI newsreaders are designed to mimic human characteristics, utilizing data that can be processed through text-to-speech technology. Numerous news organizations and media outlets across different nations, including China, South Korea, Russia, Kuwait, and India, have previously showcased advancements in the use of AI newsreaders. AI technologies are considered a significant enhancement to journalism in the digital age, especially due to their capacity to address key challenges faced by modern journalism, such as the fight against misinformation, adherence to editorial standards in news editing, and the personalization of content. The integration of artificial intelligence in journalism brings forth various professional and ethical dilemmas, including issues related to creativity suppression, lack of oversight, inherent biases, transparency deficits, inequities, and concerns regarding data usage and quality. Ultimately, the findings suggest that artificial intelligence will serve to augment the work of journalists rather than replace them. Consequently, artificial intelligence does not pose a threat to the journalism profession. (Fitria, 2024) People believed that a human newscaster was more trustworthy than a newscaster that was generated by AI; yet, people's information-seeking and behavioural intents were not affected by the type of newscaster they watched. Now journalists, anchors will not be hired but will be created. As DD Kisan has come up with new AI Anchors AI Bhoomi and AI Krish host program in Indian attire, where they can speak Indian and foreign languages. The Role of AI Anchors in Environmental News AI anchors are primarily used to deliver short, urgent bulletins and weather updates. 24/7 Coverage: AI anchors can provide immediate, around-the-clock updates on environmental disasters, such as floods, wildfires, or air quality alerts, without needing breaks. With the Multilingual Reach they can report in multiple languages simultaneously, increasing the reach of climate news to diverse, local, or rural audiences. Specialized Content: Some, such as AI Krish and AI Bhoomi, are designed specifically to deliver agricultural updates, including weather forecasts and farming trends.

Virtual Presence: They allow media houses to have a consistent, "ageless, and tireless" presenter to read scripts, including those regarding climate data. They have text to voice generation they can sync lips, eyes, head and hand movements. Tiltack,T. (2025). In 2021 Niti Ayog initiated ai teacher for cocurricular activities in a school in Kerala. AI university in Karjat Mumbai. The reliance on traditional news anchoring may lead to errors, delays, and biased coverage. As AI technology advances, it will be essential to explore how it can enhance news anchoring in terms of effectiveness, impartiality, and accuracy. The News presenters powered by AI could deliver personalized news feeds, interact with viewers, and create original news content. Concerns have been raised regarding the trustworthiness and validity of news content provided by AI (Li Xuan, 2023).

Objectives

1. Analyze the perception of netizens towards AI anchors reporting environment news by examining engagement metrics such as likes, views, and comment volume on YouTube videos featuring AI anchors.
2. To investigate sentiment analysis of netizens through their comments on YouTube videos based on AI anchors.

THEORETICAL FRAMEWORK

The Diffusion of Innovation theory, developed by Everett Rogers, provides an excellent framework for examining how new technologies, such as AI anchors, are adopted and perceived by audiences. The theory focuses on how innovations spread within a social system over time, and it emphasizes the roles of different types of adopters, from innovators to laggards. Applying this theory to the perception of AI anchors can shed light on how factors such as credibility, effectiveness, and acceptance play a role in the public's adoption of AI in news media.

LITERATURE REVIEW

Nguyen, D., & Hekman, E. (2022) examined the influence of artificial intelligence on the efficiency and accuracy of news dissemination. Their research suggests that news anchors supported by AI technology could significantly reduce production and transmission delays, thereby facilitating more immediate and real-time news coverage.

Li Xuan, & Yang. L (2023) mentioned in their study that the results indicate that news anchors utilizing artificial intelligence can enhance the precision, reliability, and promptness of their reporting. However, ethical considerations and the preservation of audience trust continue to be among the most significant challenges faced.

(Feng, 2023) ai anchor announcer can work continuously for 24 hours, without interruption. As long as the input of the "AI" composite anchor is correct, there will be no mistakes, reduces the consumption of human, material and financial resources, and reduces a large amount of costs for TV program production whereas he also highlighted how human anchor can interact with the audience at any time through humorous/ emotional language as required. Improvise questions sometimes according to given situation. When arriving at the reporting location, the initial responsibility of the reporter is to carefully observe the environment, comprehend the context, and assess the fundamental circumstances. Cardaş. R., & Laurențiu. D. (2024). This involves commenting on individuals, objects, and settings, as well as the associations that emerge from the sensory experiences of sight, sound, and touch. Subsequently, the reporter should formulate a clear concept for the interview. The adoption of these virtual personas by media organizations across the globe is on the rise, offering advantages such as cost-effectiveness, round-the-clock availability, and uniformity in content delivery. (Wang, 2021). The potential for hybrid approaches that combine the strengths of both modalities may pave the way for more dynamic, engaging, and informative media experiences. Ultimately, the findings of this study underscore the necessity for media organizations to evaluate and adapt their anchoring strategies in light of emerging technologies, ensuring they meet the evolving expectations of audiences in the digital age. (Rui. S., & Yan. S.,2024).

RESEARCH METHODOLOGY

In recent years, the field of artificial intelligence (AI) has experienced substantial and swift progress, leading to an increased interest in and utilization of intelligent applications across various sectors. Nevertheless, it is essential to recognize that AI should not be viewed as a replacement for human capabilities; rather, it serves as a tool designed to enhance human performance. Present study is for

Analysing Netizens Response through random sample method is used in the process of selecting the YouTube videos of AI anchors for observing the comment section for analysing netizen comments. Opinion mining examines various aspects, such as audience reception, likes, comments, views, for a video featuring AI anchor as technological progress. Data collection involved sourcing academic literature, industry reports, and case studies from reputable database ScienceDirect, SpringerLink, and Google Scholar. A keyword-based search was conducted, using terms like "virtual anchor," "AI anchor," "AI in media", and "AI in broadcasting." The search is restricted to studies published in the last decade to capture recent advancements in AI applications in media. In the present research, Netizens' Responses on YouTube and their sentiment analysis is adopted by the researcher.

Research Design

This study adopts a qualitative approach, using content analysis and sentiment analysis to examine user comments on AI Anchors YouTube videos. The research focuses on three selected videos from the three different YouTube Channels.

Sampling

Purposive sampling was used to select the videos and comments for analysis. The comments section of each video served as the primary unit of analysis, with each comment treated as a single data point. Every comment posted on each video was analyzed to capture the most recent public engagement.

Data Collection

Table 1: Statistics of selected AI Anchors videos, including their View counts, likes, subscribers and comments on videos

Channel Name	Video Name	Views	Likes	Subscribers	Comments	Upload Date
India Today	Morning News Headlines from Aaj Tak AI Anchor Sana weather Revolutionize TV Broadcasting & Journalism	170,088	747	100 Lakh	58	01-05-2023
The Times and The Sunday Times	Indian TV news channel premieres first AI presenter	116000	454	966K	38	14-07-2023
India Today Conclave	All AI Regional Anchors with AI Sana Come Together at India Today Conclave Mumbai #ConclaveMumbai23	16000	114	893K	9	06-10-2023

Sentiment Analysis

Table 2: Sentiment analysis of comments across three AI Anchors videos, detailing the distribution of positive, negative, and neutral comments for each video:

Video	Positive Comments	Negative Comments	Neutral Comments	Total Comments
Morning News Headlines From Aaj Tak AI Anchor Sana Revolutionize TV Broadcasting & Journalism	5	51	2	58
Indian TV news channel premieres first AI presenter	3	35	0	38
All AI Regional Anchors With AI Sana Come Together At India	1	8	0	9

Today	Conclave				
Mumbai #ConclaveMumbai23					

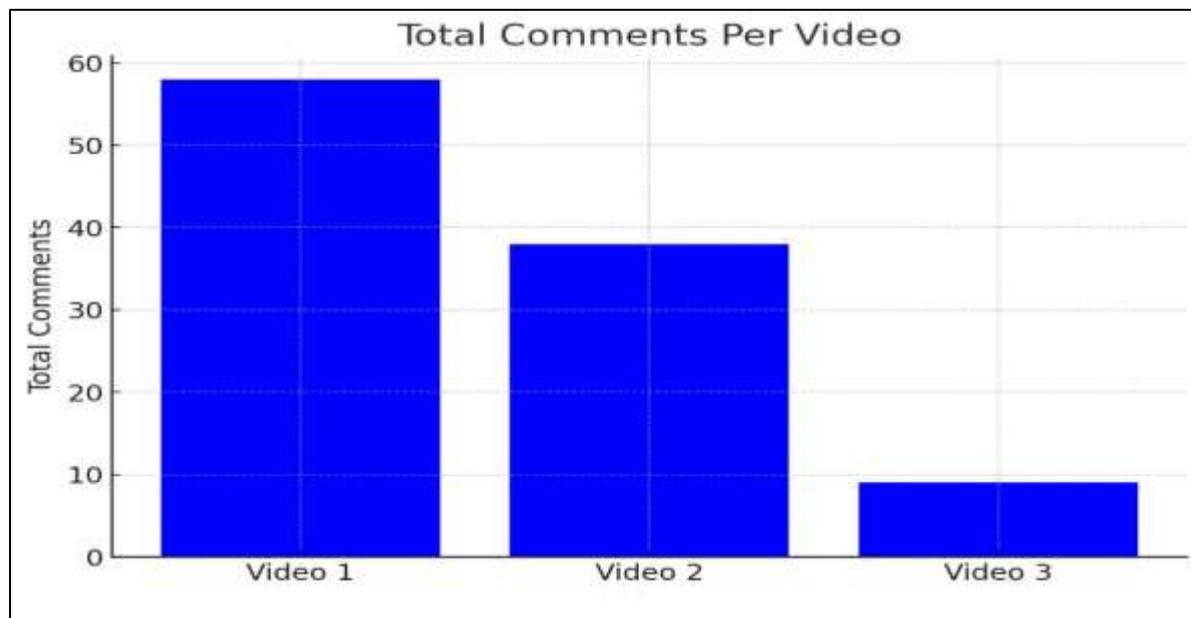


Figure 1: This figure represents the total comments received by the videos taken for study.

Data Analysis

Video 1: Indian TV news channel premieres first AI presenter

Positive Sentiment:

o Comments like "@thamsindian9915" with "😊❤️" and "@shubhambagade025" with "Bhai ye bahot sundar hai yaar 😊❤️❤️" express enjoyment and admiration.

Negative Sentiment:

o Some comments like "@majorgeneralrahul6298" and "@AmatriceBand" criticize the AI's realism, calling it "ridiculous" or stating it doesn't sound human.
 o "@tarawati319" shares concern about AI potentially replacing jobs.

Neutral or Humorous Sentiment:

o Some comments are more neutral or humorous, like "@ratnakamal1" joking about a "desi version" and calling it "CheatGPT."

Overall, for the first video under consideration the comments reflect mixed feelings. There's admiration for the potential and aesthetics of the AI, but also scepticism, concerns about realism, and humour at its expense.

The comments reflect a mixed sentiment towards the AI anchor. On one hand, there is positive sentiment, with users admiring its aesthetics and expressing excitement for AI's potential. On the other hand, negative sentiment emerges from criticisms about the AI's realism, movements, and sound, with some even raising concerns about AI replacing human jobs. There is also a noticeable amount of neutral or humorous sentiment, with people making light-hearted comments or asking about the technology. Overall, while the AI has sparked curiosity and appreciation, there's scepticism regarding its current capabilities and impact on jobs.

Video 2: Morning News Headlines from Aaj Tak AI Anchor Sana

Revolutionize TV Broadcasting & Journalism

Positive Sentiment:

Admiration & Enjoyment:

o Comments like "@pratimashrivastava6643" saying "Fabulous job" and "@bankersaddaofficial" calling the AI "beautiful ❤️" express appreciation.

o "@ajacob7482" shares a positive, affectionate comment with "I love you sana ❤️ u r truly appetising."

Support for AI in Certain Roles:

○ "@anindyachatterjee4765" suggests AI could help in areas like railway driving, highlighting the potential of AI to reduce human error.

Negative Sentiment:

Concerns About Replacement:

- "@ashwinikumarpatel8521" humorously laments the loss of news anchor jobs due to AI: "Lo bhaiya ab to news anchor ki naukri bhi gai haath se 🤔."
- "@Deepakguptaa07" shares a similar concern, suggesting AI can't replace human reporters.

Skepticism:

- "@hello.667" finds the situation humorous, equating it to a science fiction movie, suggesting disbelief or discomfort with the AI's realism.
- "@Somebum" jokingly says, "Bye, Bye humans 🤖🤖🤖," implying concern about the growing role of AI in human tasks.

Neutral or Humorous Sentiment:

Humorous Remarks such as

"@Aakibmuzahid" makes a playful joke about who to call a "dalal" (agent), humorously comparing it to an AI machine.

"@priyasahu26_" shares a light-hearted comment about discovering the AI via a reel, expressing amusement with multiple laughing emojis.

The comments reflect a mixed sentiment. While there is admiration for AI's potential and some light-hearted appreciation, there are also concerns about job displacement, AI's emotional limitations, and its increasing presence in fields typically dominated by humans. Humor and scepticism run through many of the comments, pointing to both fascination and unease.

Video 3: AI Sana Come Together at India Today Conclave Mumbai | #ConclaveMumbai23

Positive sentiment: The comment is a request or suggestion to create a podcast about Kailash Vijayvargiya, which is a constructive request, implying interest or enthusiasm for the topic.

The comment is an enthusiastic support for PM Modi, BJP, and related political topics, showing a high level of praise and admiration.

Negative sentiment: The phrase "Godi media" is a term used to criticize media outlets perceived as biased or supportive of certain political groups, showing strong disapproval of the media.

The comment expresses dissatisfaction about the portrayal of Jai, feeling that he should have appeared more traditionally Indian with a brown skin tone. This comment expresses distrust or criticism of the media, specifically accusing BJP of controlling the media, and implies the need for AI-generated reporting, which has a critical tone.

Neutral to humorous sentiment: The comment seems to be a light-hearted or playful remark about someone not speaking Bengali, likely in a humorous or teasing tone.

Negative sentiment: Neutral to playful sentiment: The comment appears to be a humorous remark on the new generation's ability to create content quickly, with a playful jab at showing off and a light-hearted tone.

The comments reflect a mix of sentiments:

- **Negative:** Discontent with media bias and representation (e.g., criticisms of media control, and dissatisfaction with a character's portrayal).
- **Positive:** Enthusiastic support for political figures like PM Modi and a suggestion for a podcast about a prominent politician.
- **Humorous/Neutral:** Light-hearted remarks, often playful or teasing in nature, without strong emotional charge.

Overall, the comments vary between criticism, support, and humour, with a noticeable focus on political topics.

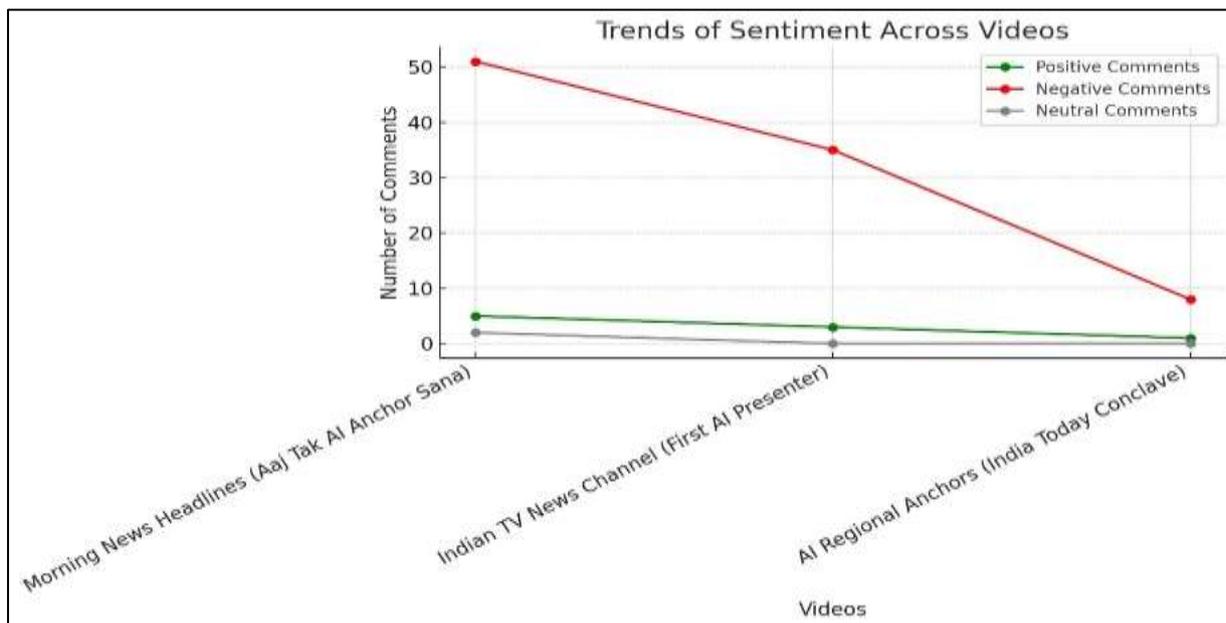


Figure 2: Trends of Sentiments across YouTube videos

The Figure 2 reflects three distinct tones: a negative sentiment criticizing media bias and control, highlighting dissatisfaction with how characters or issues are portrayed; a positive tone expressing strong support for political figures like PM Modi and suggesting a podcast to further explore such figures; and a humorous/neutral tone offering light-hearted, playful remarks without strong emotional investment. These varying tones offer a dynamic view on media influence and political discourse, balancing critique, enthusiasm, and casual commentary.

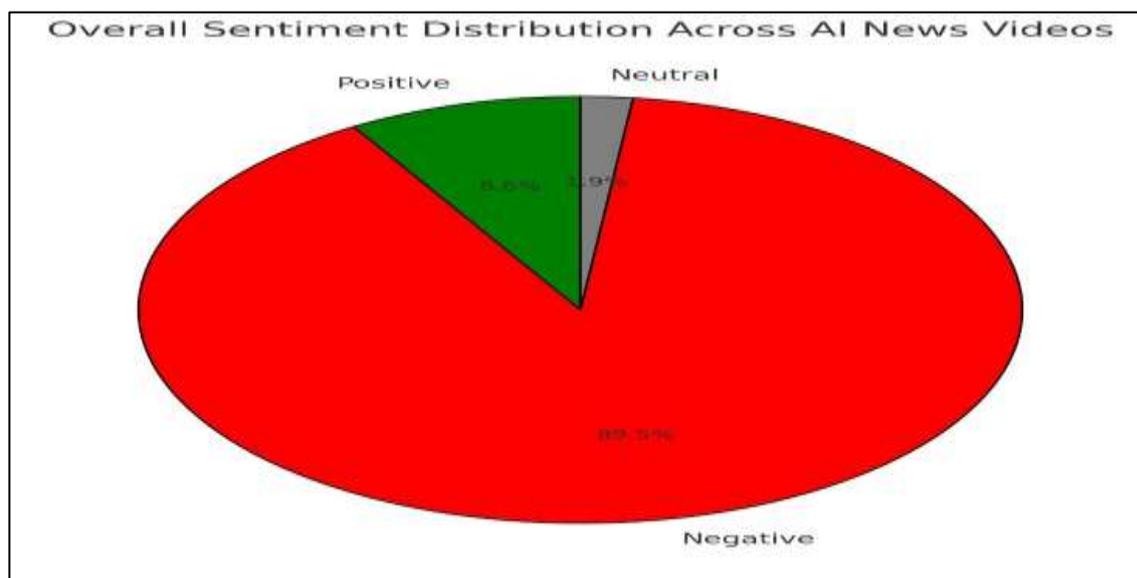


Figure 3: Overall Sentiment Distribution across AI news anchors

Present figure represents the distribution of negative, neutral and positive comments received by different Youtube videos featuring AI Anchors by different channels there were majority of negative comments regarding the humanity in danger and how there is no need to introduce ai anchors to compromise human employment and replacing human emotion required for analyses and presentation of the news reports. Such comments were followed by 8.6% of positive comments along with 1.9% neutral comments where people were not strictly opinionated.

Limitation

Limited Sample Size: Three videos may not provide a representative sample of the broader topic, such research can be extended for more sample size in further research.

Bias in Selection: The study conducted was limited on the YouTube videos only, which may introduce bias, depending on the or platforms selected. One can conduct such a study based on diverse videos and different mediums as Instagram, Facebook etc.

Conclusion: The advent of "AI" composite anchors is unavoidable for the progression of contemporary society. There are numerous reactions on social media platforms, including Instagram and YouTube, indicate a diverse range of opinions among netizens regarding AI news anchors. While some individuals have embraced the advancements in information technology that facilitate the emergence of artificial intelligence in news broadcasting, others have offered constructive feedback aimed at enhancing the quality and naturalness of future AI news anchors. Bhoomi and krish the anchors were introduced to deliver agricultural news, market trends (Mandis), weather updates, and information on government schemes to farmers in a user-friendly manner Journalists are required to discover their own creative and unique perspectives to explore the significance of news more profoundly amidst world of AI anchors. This approach will enable humanity to differentiate itself from machines and establish its role within the industry, particularly in light of the personal challenges presented by automation. AI anchors exhibit limitations in critical thinking and communication abilities, rendering them unable to engage effectively with the audience. In contrast, live anchors can surmount these challenges through dedicated training and practical experience. Consequently, it is essential to explore a viable training framework and suggest specialized educational programs for students in broadcasting and hosting, particularly in light of advancements in artificial intelligence. Emphasis should be placed on cultivating students' skills in emotional expression, audience interaction, and logical reasoning, thereby reinforcing their unique value in an era dominated by AI anchors. A mechanical hearing process may hinder the audience's understanding.

Rogers' Diffusion of Innovation theory explains AI news anchor adoption through key characteristics. Their relative advantage lies in faster, 24/7 news delivery, reduced bias, and consistent presentation, enhancing credibility. Compatibility with human-like features (natural voices, lifelike avatars) fosters acceptance, while robotic presentations may reduce trust. Complexity affects adoption—AI anchors must be easy to interact with and understand to gain audience confidence. Trialability through pilot episodes can encourage user trust, and observability allows audiences to witness benefits like quick, accurate news delivery, increasing acceptance. Episodes on environment reporting are AI can assist by processing massive datasets—satellite imagery, air quality data, or deforestation patterns—allowing human reporters to focus on investigative, in-depth narratives

AI anchors do not possess essential critical thinking and communication abilities, making it hard for them to engage with viewers, particularly during large live broadcasts. In contrast, live anchors can address these issues through proper training and experience. Consequently, it is imperative to explore a practical training model that emphasizes targeted education for students in broadcasting and hosting, particularly in the context of artificial intelligence, for positive comments such as highlighting the potential of AI to reduce human error. This approach should aim to enhance students' emotional expressiveness, engagement, logical reasoning, and the unique qualities that make human anchors irreplaceable. If such robot anchor or reported host's on-site report for reporting how people will react in case of denial of response, or misbehaviour by general masses as it will be new scenario for the masses.

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