Opportunities and challenges of using AI news anchors from the perspectives of Indian journalists

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Abstract

Artificial intelligence is affecting every industry of the world and journalism is not left. Newsrooms are using algorithms to gather, create, verify, and disseminate the news. AI news anchors use algorithms to present the news in a human like manner. In November 2018, Xinhua news agency of China introduced world's first AI news anchor. After that, many news channels and agencies of various countries generated and started using their own AI news anchors. Many opportunities and challenges are associated with the use of AI news anchors at news channels. This paper aims to know the perspectives of Indian journalists regarding the opportunities and challenges of using AI news anchors at news channels. Fifteen journalists working at Gujarati, Hindi, and English news channels were selected conveniently and in-depth interviews were conducted. This paper concludes that Indian journalists have mixed perspectives concerning the use of AI news anchors. The interviewees agree that AI news anchors are visually appealing, avoid mistakes, and deliver clear pronunciation. On the other hand, lack of emotions, and facial expressions makes AI news anchors monotonous and less interesting. Furthermore, the interviewees expressed concerns about the possible impacts of AI news on the job market, TRPs, advertisements, and revenue.

Keywords

Artificial intelligence, AI anchor, Generative AI, Human-computer interaction, Algorithms

1. Introduction

Technological innovation has consistently transformed several businesses in numerous ways over the span of two decades. However, the advancement of artificial intelligence is seen as a fundamental aspect of technological evolution over the past decade [1,2]. Numerous sectors are employing artificial intelligence, and the news media sector is not an exemption [3,4,5,6].

In journalism, generative artificial intelligence, a subset of artificial intelligence, can be used for many activities at all stages of the reporting procedure, including the collection, creation, authentication, and dissemination of news [7]. Currently, many news channels are using AI-enabled news anchors for the purpose of news dissemination. These news anchors use algorithms to present the news in a human-like manner. Artificial intelligence (AI) news anchors can be defined as generative AI entities capable of replacing or augmenting human anchors to provide programs in a seamless and multilingual manner, extensively used in television broadcasts, live streaming, brand marketing, cinema, and entertainment [8].

On 7 November 2018, the Chinese state news agency Xinhua introduced the world's first AI news anchor named Qiu Hao [9]. This AI news anchor was created by Xinhua in collaboration with the Chinese search engine Sogou, using machine learning to replicate the speech, facial expressions, and gestures of actual broadcasters, thus presenting a "lifelike image rather than a cold robot" [10]. After that, many news channels and agencies in various countries generated and started using their own AI news anchors, for example, Sana and Lisa in India, Hermes in Greece; Fedha in Kuwait; Ni Zhen in Taiwan [11] Nadira, Sasya, and Bhoomi in Indonesia; Joon and Monica in Malasiya [12].

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Artificial intelligence anchors are used predominantly in online news broadcasts [12]. Artificial intelligence anchors have arisen due to the Internet; yet, their application extends beyond online media. Several AI anchors have begun to appear in television media. They co-host programs alongside conventional hosts, enhancing the hosting format. The particular manifestation of AI in television media is more adaptable. Anchors with artificial intelligence create a novel space for innovation in the production and distribution of broadcast media. In this era of AI, it is also necessary to know what people are thinking about the use of AI news anchors. Previous research studies the perspectives of news workers, academics, and experts on the use of artificial intelligence in journalism [13,14,15,16,17]. However, research on what journalists think about using AI news anchors in newsrooms needs to be more extensive. This paper fills this gap and aims to know the perspectives of Indian journalists on the opportunities and challenges of using AI news anchors for news channels.

2. Objectives and Research Questions

The primary objective of this paper is to know and analyse the opportunities and challenges of using AI news anchors for news channels from the perspectives of Indian journalists. This study primarily follows and answers two research questions:

RQ1: What are the opportunities of using AI news anchors at news channels?

RQ2: What are the challenges of using AI news anchors at news channels?

3. Methodology

This study employs semi-structured in-depth interview method to study the perspectives of Indian journalists regarding the use of AI-anchors at Indian news channels. The in-depth interview method is considered efficient for acquiring insights from insiders or specialists regarding a novel or emerging phenomena [18,19,20,21]. Such type of dialogical interviews provide explanations, perspectives, and narratives to the researchers [22,23]

For the selection of journalists, an intentionally convenient sample was selected, encompassing fifteen journalists working at India's Gujarati, Hindi, and English news channels. For the list of prominent Indian and experienced journalists, authors used promotehour.com. This list provides a directory of Indian journalists with their beats, affiliations, and contact details. Out of thirty-five invitations sent via email, eleven journalists who responded were selected for participation. The remaining four journalists were included through snowball sampling. The interviews were carried out in September 2024 in person or over Zoom.

Each interview averaged thirty minutes, after which the replies were transcribed, and qualitative thematic analysis was performed using NVivo 15[1], the most trusted qualitative analysis software. Subsequent to the transcription, the gathered interview data underwent qualitative thematic analysis to reveal emerging narrative patterns, enabling the researcher to synthesize the acquired data and organize it for study [24]. The journalists' perspectives were compiled, analyzed for comparison, and categorized into two primary themes: opportunities and challenges associated with using AI news anchors.

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4. Results

4.1. Opportunities

According to the interviewees, one of the many findings is the appearance of AI news anchors.

"AI news anchors look so gorgeous and attractive compared to human anchors. Most of the AI news anchors in the world are females to attract the audiences in terms of beauty". (Interviewee 12)

Interviewees also admit that AI news anchors speak very clearly.

[1]https://lumivero.com/products/nvivo/

"Human anchors sometimes use wrong pronunciations and they fumble also. But this is not the problem with AI news anchors as they speak very clearly with right and appropriate pronunciations." (Interviewee 7)

Interviewees also agree regarding the potentialities of AI news anchors. "AI news anchors can work for twenty-four hours without getting tired." (Interviewee 1)

"AI news anchors do not need breaks". (Interviewee 3)

"AI news anchors do not need to read the headlines and news scripts before actual broadcasting". (Interviewee 5)

"AI news anchors will not look tired anytime and they will attract the audience always with an attractive smile." (Interviewee 4)

Interviewees also focus on the economic benefit of AI news anchors.

"We do not need to pay to AI news anchors." (Interviewee 9)

"We do not need to pay for makeup and costume charges for AI news anchors". (Interviewee 5)

4.2. Challanges

Interviewees also stress out the challenges of using AI news anchors at news channels. On of the most challenging aspect of using AI news anchors is the cost.

"To create an AI news anchor, a news channel has to invest lots of amount of money which small news channel cannot afford." (Interviewee 10)

Emotions and facial expressions also play a crucial role while presenting a news.

"What if an AI news anchor is delivering a news of death of any person of utmost importance without any sad facial expression and sorrow in a tone?" (Interviewee 11)

"Sometimes an anchor needs to lower the pitch while delivering some type of news, for example, news of sexual assault, murder, tsunami, train accident, among others. If such types of news will be presented by an AI news anchors, our audiences will not be able to relate with it." (Interviewee 13)

Journalists also worry about the job loss in the field of journalism.

"If news channels will start using AI news anchors, and where anchors will go? What if a person has only anchoring skills? What this person will do? This will decrease the job opportunities for news anchors." (Interviewee 12)

Journalists also worry about the experiments with AI news anchors.

"New technology always comes with new challenges and experiments. News channels will feel fear to start experimenting with AI news anchors. They will think that my audiences may start shifting to another news channel." (Interviewee 7)

Journalists also worry about the TRP and revenue of the news channel.

"Implementing AI news anchors can decrease the television rating point (TRP) of any news channel. Decreased TRPs can adversely affect the advertisements and revenue of any news channel". (Interviewee 9)

5. Conclusion and Future Work

Indian journalists have mixed perspectives regarding the use of AI news anchors at news channels. While pointing out the opportunities of using AI news anchors, journalists say that because of visual appeal, it can attract the audiences. As AI news anchors are generated using algorithms and trained data, it has no need to read the headlines and scripts before the actual broadcasting. Journalists concur that the use of AI news anchors eliminates the possibility of pronunciation errors and on-air fumbles during broadcasts. Authors also found that using AI news anchors also will save the money of news channels as they do not need to pay to AI news anchors and do not need to invest for makeup and costume for them.

On the other hand, journalists also stress on the challenges of using AI news anchors at news channels. One of the biggest challenges of adopting AI news anchor is cost. A news channel wishing to use AI news anchor will have to invest a lot. It also demands expertise. Regular maintenance is also required,

which incurs significant costs. Lack of emotions and facial expressions are also concerns related to AI news anchors. Since AI news anchors lack emotional capacity, it is challenging for them to express happiness when delivering positive news or convey sadness when reporting on somber topics such as death, sexual assault, or accidents. Because of that, audience will lose an interest to listen AI news anchor. AI news anchor also has a negative impact on job market. It will decrease or end the job opportunities for news anchors.

The findings of this study come with limitations also. This study was conducted with the journalists of those news channels which are situated in Ahmedabad and New Delhi. Further research can be conducted in different parts of the world. This study uses in-depth interview method as a research tool. In the future, research can use survey method of focus group discussion also. The sample size was rather limited and does not represent the vast diversity of the media landscape in India. Hence, there is a need for broader studies involving more journalists and news organizations. Researchers can interview or survey more number of journalists in the future.

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