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Analyzing the Continuance Intention to Use AI News Anchors for Daily Information Needs: An Expectation Confirmation Theory Approach

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ABSTRACT

The development of artificial intelligence (AI) technology has brought significant changes in the broadcasting world, one of which is the emergence of AI-based news anchors. This technology allows news delivery by virtual characters capable of conveying information with voice and expressions almost identical to humans. Although it provides efficiency and consistency in news presentation, its impact on the emotional connection between the audience and the news anchor, as well as the ethical and legal issues that arise, has not been widely studied. This research aims to assess how audiences receive the use of AI as news anchors and measure its influence on audience satisfaction and intention to use the technology. Using a quantitative approach, this study explores audience perceptions regarding trust, information quality, and innovation in the context of news broadcasting. It is expected that the results of this research will provide deeper understanding about the acceptance and challenges faced by AI news anchors in the future media industry.

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INTRODUCTION

Artificial Intelligence (AI) has brought significant changes to the broadcasting industry with the emergence of the "AI anchorman" or AI-based news anchors. This technology utilizes voice synthesis and expressions to create virtual characters capable of delivering news with skills comparable to human broadcasters [1]. Strong communication skills are essential, especially in broadcasting, where news anchors need the ability to speak, listen, and adapt quickly. Without formal training, the news anchor method has proven effective in improving speaking skills and preparing students to face challenges in communication careers [2].

Previous studies have shown that AI-based news anchors have been introduced in the journalism sector in various countries such as Indonesia, China, South Korea, Russia, Kuwait, and India. With a human-like appearance and equipped with text-to-speech technology, AI news anchors offer an efficient alternative that potentially replaces human presenters in news broadcasting [3]. Rambe explains that future competition should not be viewed as a battle between humans and machines, but rather between humans who do not use and those who use digital technology developments. Therefore, digital technology for humanity exists to encourage the use of digital-based tools and systems to improve and enhance various aspects of human life [4].

The term "news anchor" is often used in the United States and Canada to refer to news presenters who are also involved in writing or editing their program materials. Besides guiding discussions and interviewing sources in the studio, they often act as commentators in various

news programs [5] On April 21, 2023, TVOne introduced AI-based news presenter avatars resembling Karni Ilyas, along with three other avatars, Nadira, Sasha, and Bhoomi. As one of Indonesia's leading television stations, TVOne views the use of AI avatars as an opportunity to enrich news presentation in the era of media convergence [6]. Professional speaking ability for news anchors includes communication skills in various situations such as business presentations, negotiations, interviews, and news delivery [7].

Although previous research has provided good insights into the development of AI in the news and broadcasting industry, several questions remain unanswered. For example, how will AI affect the emotional relationship between viewers and presenters? How will regulations handle errors made by AI without legal accountability? [1] How can synthetic news texts be practically detected in real-world scenarios? [8] These questions become the focus of further research and are expected to provide deeper understanding of AI's impact in this field [9].

Research on AI news anchors is important because it offers insight into the development of artificial intelligence technology in the news broadcasting industry. With AI, news delivery becomes more efficient and consistent, but its impact on quality and emotional connection with viewers still needs to be explored. Furthermore, this research helps understand the transformation of human roles in broadcasting in the future, where AI has the potential to replace or complement human news anchors. Ethical and legal responsibility questions related to AI use are also critical, considering possible errors that may occur. Therefore, this research contributes to preparing society and the workforce to face changes brought by AI technology in communication.

This study aims to analyze the intention of sustainable use of AI news anchors in meeting daily information needs using the expectation-confirmation theory approach. The research focuses on identifying users' expectations and perceptions of AI news anchors and their impact on satisfaction and usage intention. Additionally, it evaluates audience acceptance of AI innovation in news delivery, analyzes its influence on information quality and user trust, and explores implications for mass media strategies in integrating AI technology to enhance audience engagement.

METHOD

To measure and analyze audience perceptions of the use of AI news anchors in news delivery, this study employs a quantitative approach. Quantitative research is a systematic method that focuses on numerical measurement and the analysis of phenomena as well as relationships between variables. This method aims to provide answers to research questions related to the relationships among measurable variables, with the objectives of explaining, predicting, and controlling a phenomenon [10]. It is chosen because it produces numerical data that can be statistically analyzed, offering a measurable depiction of users' acceptance, expectations, and satisfaction toward this technology.

To provide an up-to-date overview of audience acceptance, a cross-sectional research design was used, collecting data within a specific time interval. Students aged 18 to 24 years were selected as respondents because they represent a demographic that actively uses digital technology and is considered more receptive to new technological innovations such as artificial intelligence. Data were collected through an online questionnaire covering factors such as trust, news delivery quality, and technological advancements related to AI news anchors. Descriptive data analysis was applied to summarize respondents' response patterns, including their levels of trust and preferences regarding the use of AI in news broadcasting.

Table 1. Research Instrument

No	Aspect	Statements	Statements No	Reference
1	Trust and Acceptance of AI News Anchor	1. I feel comfortable watching news delivered by AI news anchors. 2. AI news anchors can provide accurate and reliable information. 3. I prefer news delivered by AI over news presenters. 4. AI news anchors can reduce bias in news delivery. 5. I believe AI news anchors will become an important part of the future media.	1-5	[11]
2	Quality of News Delivery	6. I believe AI news anchors can deliver news clearly and informatively. 7. The visual appeal of AI news anchors affects my interest in watching the news. 8. The voice and intonation of AI news anchors make news delivery more engaging. 9. I feel AI news anchors can explain complex topics well. 10. The quality of news delivery by AI news anchors is comparable to human presenters.	6-10	[11]
3	Innovation and Technology	11. I am interested in technological advances that enable the use of AI as a news anchor. 12. The use of AI in news delivery is a positive step for the future of media. 13. I feel AI technology still needs improvement before it can replace human presenters. 14. AI news anchors offer new opportunities in how we consume news. 15. I believe innovations like AI news anchors can increase efficiency in the media industry.	11-15	[11]

The table below shows a five-point Likert scale used to measure respondents' level of agreement with statements. A score of one indicates "strongly agree" for respondents who fully support the statement, two indicates "agree" but not fully, three indicates "neutral" or no clear opinion, four indicates "disagree," and five indicates "strongly disagree" for respondents who do not support the statement. Perception or opinion data can be collected more systematically using this scale.

Table 2. Five-Point Likert Scale

Scale	Description
1	Strongly Agree
2	Agree
3	Neutral
4	Disagree
5	Strongly Disagree

Table 3 shows the Likert Scale for Customer Satisfaction Survey used to measure respondents' perceptions of a variable or particular statement. This scale consists of five categories, ranging from "Very Good" with a value range of 1.00–1.80, "Good" with a range of 1.81–2.60, "Neutral" within 2.62–3.40, "Not Good" in the range of 3.41–4.20, to "Very Bad" with a value of 4.21–5.00. This scale is useful for mapping satisfaction levels or ratings based on intensity levels, facilitating quantitative data analysis. The categorization allows researchers to interpret survey results more systematically and structured.

Table 3. Customer Satisfaction Survey Likert Scale

Scale Range	Description
1.00–1.80	Very Good
1.81–2.60	Good
2.62–3.40	Neutral
3.41–4.20	Not Good
4.21–5.00	Very Bad

RESULTS AND DISCUSSION

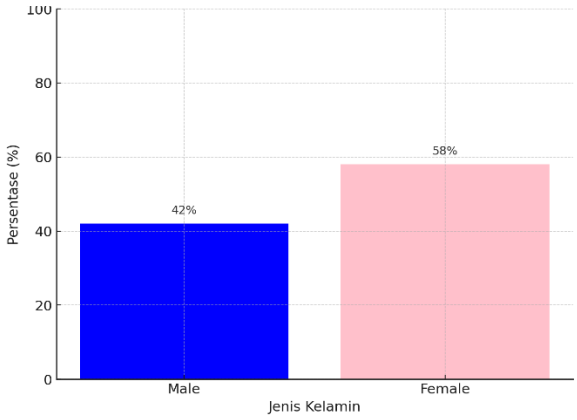

Figure 1. Distribution Diagram of Respondents Based on Gender

The data illustrates the distribution of respondents based on gender and age. With 42% male and 58% female, and an average age of both being 18 years old, it is apparent that the

majority of respondents are young people who are more familiar with digital technology, including AI.

In research on AI news anchors, this composition is relevant because the younger generation tends to be more accepting of technological innovations, such as AI acting as news anchors. In addition, the greater number of female respondents may influence how they view the role of AI, especially regarding gender representation in technology. This demographic information provides important context for understanding respondents' views on the use of AI.

Table 4. Aspect 1 Respondents' Assessment or Response

Number of responses					sum	Mean	Kesin
5	4	3	2	1			
12	50	179	112	52	1489	2.65	Baik

The table above illustrates the results of the analysis of Aspect 1 using the Likert scale, which is based on the number of respondents' responses for each value category (5, 4, 3, 2, 1). The "Number of Responses" column shows the frequency of respondents choosing each scale level. From these data, a total score (sum) of 1489 was obtained, and the average (mean) of respondents' responses for this aspect was 2.65, which is interpreted as a Good category according to the Likert scale criteria. This shows that most respondents gave a positive assessment of Aspect 1, although there was variation in individual responses. This table provides an organized quantitative picture of the evaluation of this aspect.

The Likert scale is generally used to measure attitudes by asking respondents to answer in certain categories, such as strongly agree to strongly disagree. Respondents' responses are then summed up to produce an overall score that reflects their attitudes[12]. Interpretation of the Likert scale, including the importance of the middle category and the number of response categories, plays a role in understanding the distribution and perceptions of respondents on a topic [13].

Table 5. Aspect 2 Respondents' Assessment or Responses

Number of responses					Sum	Mean	Kesin
5	4	3	2	1			
14	54	156	127	54	1062	2.62	Baik

The aspect table 5 shows how the respondents' responses are distributed using a Likert scale. A score of 5 (Very Good) indicates 14 responses, a score of 4 (Good) indicates 45 responses, a score of 3 (Enough) indicates 15 responses, a score of 2 (Less) indicates 12 responses, and a score of 1 indicates very less 54 responses. In accordance with Budiaji's guidelines [14]. The total score is 1062, with an average (mean) of 2.62. The results show that the aspects assessed are relatively good, although the contribution of low scores is quite significant.

Table 6. Aspect 3 Respondents' Assessment or Responses

Number of responses					Sum	Mean	Kesin
5	4	3	2	1			
14	54	156	127	54	994	2.45	Baik

Table 6 similar response distribution with details: score 5 as many as 14 responses, score 4 as many as 45 responses, score 3 as many as 15 responses, score 2 as many as 12 responses,

and score 1 as many as 54 responses. The total score obtained was 994 with an average (mean) of 2.45, which is also included in the Good category. Although both are in the same category, the average value for Aspect 3 is slightly lower than Aspect 2, which may be due to the high number of responses at low values (score 1). Overall, both Aspect 2 and Aspect 3 show positive respondent assessments. However, the lower average value for Aspect 3 can be used as evaluation material to improve respondents' perceptions of this aspect.

Table 7. Descriptive Data on Trust and Acceptance Aspects of AI News Anchors

No	Item/Statement/Question	Mean	Median	Modus	Minimum	Maksimum	Sum
1	I feel comfortable watching news delivered by AI news anchors.	2.51	3	3.00	1	4	203
2	AI news anchors can provide accurate and reliable information.	2.54	3	3.00	1	4	206

Table 7 above presents descriptive data where Descriptive analysis can be the initial step before carrying out other analyses because descriptive analysis can help researchers identify data. This is because descriptive analysis will be very helpful in organizing, compiling, and presenting in a form that is easy to understand [15]. Regarding respondents' assessment of the quality of news delivery by AI news anchors based on two statements. The first statement relates to respondents' belief that AI news anchors are able to deliver news clearly and informatively. The average score for this statement is 2.54, with a median and mode value of 3, while the minimum and maximum scores are 1 and 5, respectively. The total overall score collected from respondents is 206. The second statement assesses the extent to which the visual appeal of AI news anchors influences respondents' interest in watching the news. This statement received an average score of 2.73, which is slightly higher than the first statement. The median and mode values remain at 3, with a minimum score of 1 and a maximum of 5, and a total score of 221. Overall, these results indicate that the visual appeal of the AI news anchor tends to have a greater influence on respondents' interest than the AI's ability to deliver news clearly and informatively. The response scale that varies from 1 to 5 indicates differences in views among respondents.

Table 8. Descriptive Data on News Delivery Quality Aspects

No	Item/Statement/Question	Mean	Median	Modus	Minimum	Maksimum	Sum
1	I believe AI news anchors can deliver news clearly and informatively.	2.54	3	3.00	1	5	206
2	The visual appeal of AI news anchors affects my interest in watching the news.	2.73	3	3.00	1	5	221

The results of the survey aimed at measuring public perceptions of the quality of news delivery by AI news anchors are shown in Table 8. The results show that the majority of respondents believe that AI can deliver news clearly and informatively, and that AI can make people more interested in watching the news. However, there are differences of opinion among respondents, indicating that there is room for improvement. Further research is needed to identify factors that influence public perception and to develop better AI news anchors that can interact with the audience and are more credible and objective.

Table 9. Descriptive Data of Innovation and Technology Aspects

No	Item/Statement/Question	Mean	Median	Modus	Minimum	Maksimum	Sum
1	I am interested in technological advances that enable the use of AI as a news anchor.	2.52	2	2.00	1	5	204
2	The use of AI in news delivery is a positive step for the future of media.	2.41	2	2.00	1	5	195

This table presents descriptive data on the innovation and technology aspects related to AI news anchors based on respondents' responses to two statements. The first statement asks respondents' interest in technological advancements that enable the use of AI news anchors in the media industry. The results show an average score of 2.52 with a median of 2 and a mode of 2. The minimum score is 1, while the maximum is 5, with a total score of 204. The second statement measures respondents' views on the use of AI in news delivery as a positive step for the future. The average score for this statement is 2.71, slightly higher than the first statement. The median and mode are 3, while the minimum and maximum scores remain at 1 and 5. The total score for this statement is 235. Overall, the data shows that respondents are interested in the technological innovations presented by AI news anchors, although higher responses are seen in the view that the use of AI for news delivery is considered a positive step for the future of media. The difference in average scores between the two statements reflects the variation in respondents' assessments of technological innovation and its impact.

CONCLUSIONS

This study evaluates the sustainability of using AI news anchors in presenting daily information based on the expectation confirmation theory. The results show that respondents, especially the younger generation, are quite open to AI innovation. Most feel comfortable with news delivered by AI and believe that AI is able to provide accurate information. Although the quality of delivery is considered good, the visual appeal of AI news anchors has a greater influence on viewing interest. Respondents are also interested in the advancement of AI technology, although some feel that this technology still needs improvement before it can completely replace humans. This study highlights the importance of quality interactions between AI and audiences and the ethical challenges that need to be addressed in the use of AI in the future of media.

To improve AI news anchors, developers should focus on delivering news in a more natural and emotional way to make viewers feel more connected. Visual and audio aspects also need to be improved to create a more engaging and personal viewing experience. Given that this

study involved many young respondents, it is important to conduct further research that covers different age groups and backgrounds to get a more comprehensive picture of the acceptance of AI in news broadcasting. In addition, ethical and regulatory issues regarding the use of AI in broadcasting need to be addressed immediately to minimize risks, such as the spread of inaccurate information, and to ensure that AI remains transparent and accountable. In the future, media outlets should consider integrating AI with human presenters, so that AI can serve as a complement rather than a complete replacement for humans. That way, AI can be utilized optimally without eliminating the human touch that is important in delivering news.

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