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# Critical Discourse Analysis of Artificial Intelligence Narratives in Online Media

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**ABSTRACT**

The rapid development of artificial intelligence (AI) technologies has significantly increased the presence of AI-related narratives in online media, where digital platforms play an important role in shaping public perceptions, attitudes, and ideological understandings of technological innovation. This study aims to critically analyze how artificial intelligence is represented and framed within online media discourse and to uncover the ideological meanings embedded in AI-related narratives. The research employed a qualitative approach using a descriptive-critical design through the framework of Critical Discourse Analysis (CDA). The data consisted of online news articles, blogs, social media posts, and AI-related digital publications collected from various online platforms published between 2020 and 2026. The analysis applied Norman Fairclough's three-dimensional CDA model, including text analysis, discursive practice, and social practice. The findings revealed several dominant representations of AI in online media, including AI as technological progress, economic opportunity, human replacement, ethical threat, and futuristic solution. The study also identified dominant ideological patterns such as techno-optimism, fear-based ideology, commercialization ideology, and ethical awareness reflected through lexical choices, metaphors, headlines, emotional language, and framing strategies. Furthermore, the findings demonstrated that online media discourse significantly influences public understanding of artificial intelligence by shaping trust, social anxiety, labor concerns, and ethical perspectives regarding technological development. Overall, this study concludes that online media functions not only as a channel of information dissemination but also as a powerful discursive institution that constructs ideological meanings and public perceptions of artificial intelligence through strategic language use and media framing.



## 1. Introduction

The rapid advancement of artificial intelligence (AI) technology has significantly transformed various aspects of human life, particularly in the field of digital communication. AI is increasingly integrated into everyday activities through virtual assistants, recommendation algorithms, automated content generation, facial recognition systems, and data analytics technologies(Maedche et al., 2019). Alongside this technological growth, online media has become one of the primary platforms for disseminating information and shaping public understanding of AI. News portals, social media platforms, blogs, and digital publications continuously construct narratives about AI that influence how society perceives technological progress, innovation, ethics, and potential risks associated with AI development.

Online media plays a crucial role in constructing public discourse because media language is not neutral(Braun & Gillespie, 2011). Media institutions selectively frame information through linguistic choices, visual representations, headlines, and narrative structures that reflect particular ideologies and interests. In the context of AI, online media

frequently portrays artificial intelligence as a symbol of innovation, efficiency, and future progress capable of transforming industries, healthcare, education, and economic systems. AI is often represented as a revolutionary technology that can improve productivity and solve complex human problems. Such representations create optimistic narratives that position AI as an essential component of modern civilization and digital transformation.

However, online media also presents alternative narratives that emphasize the negative implications of AI development. AI is frequently depicted as a threat to employment due to automation replacing human labor in various sectors. In addition, concerns regarding privacy, algorithmic bias, misinformation, and ethical accountability have contributed to media narratives that portray AI as a potential danger to society. Some online discussions even frame AI as a tool of surveillance and social control, particularly in relation to government monitoring systems, data collection practices, and predictive technologies. These contrasting narratives demonstrate that media representations of AI are closely connected to ideological positions, institutional interests, and power relations embedded within digital discourse.

To critically examine these representations, Critical Discourse Analysis (CDA) provides an appropriate analytical framework for uncovering hidden ideologies, power structures, and linguistic strategies within media texts(KhosraviNik, 2014). CDA views language as a social practice that is closely related to issues of power, dominance, and inequality. Through CDA, researchers can analyze how specific lexical choices, metaphors, sentence structures, and framing strategies are used to construct particular meanings about AI in online media discourse. This approach allows researchers to move beyond the surface meaning of texts and investigate how discourse shapes public perceptions and social realities regarding technological development.

Several scholars have contributed significantly to the development of CDA theories relevant to media discourse analysis. Norman Fairclough's three-dimensional model emphasizes the relationship between textual analysis, discursive practices, and broader social practices. Fairclough argues that discourse both reflects and shapes social structures and ideological processes. Meanwhile, Teun A. van Dijk's socio-cognitive approach focuses on the interaction between discourse, cognition, and society by examining how media texts influence public knowledge, beliefs, and attitudes. These theoretical perspectives are highly relevant for analyzing how online media constructs AI narratives and influences audience understanding of technology.

One of the important studies in AI media discourse was conducted by Dennis Nguyen and Erik Hekman in 2022 through their study entitled The News Framing of Artificial Intelligence: A Critical Exploration of How Media Discourses Make Sense of Automation. Their research analyzed how news media frame AI technologies within narratives of automation, innovation, and economic transformation. The study found that media discourse frequently presents AI as both an opportunity and a threat, creating a dualistic narrative that simultaneously promotes technological optimism and social anxiety. The researchers argued that news framing significantly shapes public understanding of AI and influences societal expectations regarding automation and labor transformation.

Another influential study was conducted by Igor Ryazanov, Carl Öhman, and Johanna Björklund in 2024 in their work How ChatGPT Changed the Media's Narratives on AI: A Semi-Automated Narrative Analysis Through Frame Semantics. This study examined more than 5,000 online news articles discussing AI before and after the release of ChatGPT. Their findings revealed that media narratives shifted dramatically after ChatGPT's emergence, with AI increasingly associated with risk, fear, and political concern. The study also demonstrated that media discourse began attributing more human-like qualities to AI systems, reinforcing anthropomorphic narratives in digital communication.



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Research focusing on AI discourse in social media environments has also expanded in recent years. In 2024, Dan Heaton and colleagues published a study entitled "ChatGPT Says No": Agency, Trust, and Blame in Twitter Discourses After the Launch of ChatGPT. This research investigated public discourse on Twitter/X concerning ChatGPT and explored how users negotiated concepts such as responsibility, trust, and technological agency. The findings showed that social media users frequently personified AI systems and framed ChatGPT as an autonomous actor capable of decision-making. This discourse contributed to shifting perceptions regarding accountability and ethical responsibility in AI usage.

Similarly, Brent Lucia, Matthew Vetter, and Varshil Patel in 2025 conducted research titled The Dystopian Imaginaries of ChatGPT: A Designed Cycle of Fear. Their study critically analyzed journalistic discourse surrounding ChatGPT and found that online media frequently constructed dystopian narratives emphasizing misinformation, academic dishonesty, ethical threats, and social disruption. The researchers argued that fear-based narratives became dominant rhetorical strategies in media coverage of generative AI technologies.

In the field of education and AI discourse, Nazia Anwar published a study in 2025 entitled Complementing or Substituting: A Critical Discourse Analysis of Global Media Narratives on the Use of AI in Education. Using CDA and appraisal theory, the study analyzed 200 English-language news articles published between 2020 and 2025. The research demonstrated that media narratives about AI in education oscillated between two dominant perspectives: AI as a supportive educational tool and AI as a substitute for human teachers. The study highlighted how media discourse contributed to public uncertainty regarding the future role of educators in technologically mediated learning environments.

Research on ethical discourse surrounding AI has also received scholarly attention. In 2024, Victoria Imariaikowa Emasealu conducted a study titled Framing AI Ethics in Public Discourse: A Critical Discourse Analysis of Media Coverage on AI in Child Protection. The study explored how U.S. media framed AI technologies used in child protection systems. Findings revealed a gradual shift from technological optimism toward more critical ethical discussions involving privacy, surveillance, algorithmic bias, and accountability. The research emphasized the importance of media framing in shaping public ethical awareness of AI applications.

In Indonesia, discourse studies on AI have also begun to emerge. Umar Mansyur and Jufri conducted a 2025 study entitled Conceptual Operation Strategies of Artificial Intelligence Metaphors in Indonesian Mass Media: A Cognitive Linguistic Study. Their research investigated metaphorical representations of AI in Indonesian media and found that AI was frequently conceptualized through metaphors associated with intelligence, power, and human capability. The study demonstrated how metaphorical language contributes to shaping ideological understandings of technology within society.

Previous studies have explored technology discourse, digital communication, and media framing in various contexts. Some research has examined public perceptions of AI ethics, automation, and digital transformation, while others have investigated media framing of emerging technologies. Nevertheless, studies specifically focusing on AI narratives in online media through a Critical Discourse Analysis perspective remain relatively limited. Existing studies often emphasize technological functions and economic impacts rather than critically analyzing the ideological dimensions embedded within media discourse. Furthermore, there is still a lack of research examining how linguistic choices and framing strategies shape societal perceptions of AI in contemporary digital communication.

Based on these gaps, this study aims to analyze the representation of artificial intelligence in online media discourse using a Critical Discourse Analysis approach(KhosraviNik & Unger, 2016). This research seeks to identify dominant AI narratives, uncover ideological meanings embedded in media texts, and examine how linguistic strategies influence audience perceptions of AI technology. The study addresses several research



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questions: How is AI represented in online media discourse? What ideologies are embedded within AI narratives? How do linguistic choices and framing strategies shape public perceptions of artificial intelligence? By answering these questions, this research is expected to contribute to the understanding of digital media discourse and provide critical insights into the relationship between technology, language, ideology, and power in contemporary society.

## 2. Method

This study employed a qualitative research approach using a descriptive-critical design to analyze artificial intelligence (AI) narratives in online media discourse(Boskic, 2011). Qualitative research was considered appropriate because the study focused on interpreting meanings, ideologies, linguistic structures, and discursive strategies embedded within media texts rather than measuring numerical data. The descriptive-critical design enabled the researcher to systematically describe patterns of AI representation while critically examining the ideological dimensions and power relations reflected in online media narratives. The study applied Critical Discourse Analysis (CDA) as the primary analytical framework to uncover how language is used to construct social realities, influence public perceptions, and reinforce particular ideological positions regarding artificial intelligence.

The data sources of this study consisted of various forms of online media texts discussing AI-related issues(Ouchchy et al., 2020). These included online news articles, technology blogs, social media posts, digital magazines, and AI-related publications published on internet-based platforms. The researcher selected several prominent media platforms that actively publish AI-related content, including technology news websites, digital newspapers, online discussion forums, and social media platforms such as Twitter/X and Reddit. The data were collected from publications released between 2020 and 2026 because this period represents the rapid expansion of generative AI technologies and increasing global public discourse surrounding artificial intelligence. A total of 50 online texts were analyzed in this study, consisting of 30 online news articles, 10 blog articles, and 10 social media discussion threads related to AI narratives. The selected texts addressed themes such as AI innovation, automation, ethics, surveillance, employment, and technological transformation.

Data collection was conducted using the documentation method, which involved systematically collecting, categorizing, and archiving online media texts related to artificial intelligence discourse(Lee et al., 2020). The researcher employed purposive sampling to select relevant data sources based on specific research criteria. The criteria for selecting texts included: (1) the text explicitly discussed artificial intelligence or AI-related technologies; (2) the text contained narrative framing, evaluative language, or ideological representation concerning AI; (3) the text was published on accessible online media platforms; and (4) the text generated significant public attention or engagement through comments, shares, or online interaction. This purposive sampling technique allowed the researcher to focus on texts that were most relevant to the objectives of the study and capable of providing rich discursive data for analysis.

The data analysis technique used in this study was based on Norman Fairclough's three-dimensional model of Critical Discourse Analysis(Beiki & Gharaguzlu, 2017). Fairclough's CDA framework was selected because it provides a comprehensive analytical approach that connects textual features with broader social and ideological contexts. The first stage, text analysis, focused on examining linguistic elements within the selected media texts, including lexical choices, metaphors, modality, sentence structures, headlines, and rhetorical strategies used to represent AI. This stage aimed to identify how language constructs specific meanings and perceptions regarding artificial intelligence.

The second stage, discursive practice analysis, examined how media texts were produced, distributed, and consumed within digital communication environments. This stage



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analyzed the role of media institutions, journalists, content creators, and digital audiences in shaping AI narratives. The researcher also investigated how online platforms contribute to the circulation and reinforcement of dominant discourses about AI through algorithmic visibility, audience engagement, and digital interaction.

The third stage, social practice analysis, explored the broader sociocultural and ideological contexts influencing AI discourse in online media. This stage examined how AI narratives reflect issues of technological power, capitalism, surveillance, labor transformation, ethics, and digital governance. Through this multidimensional analysis, the study sought to uncover the hidden ideological assumptions embedded within media representations of artificial intelligence and their implications for society.

To ensure the validity and trustworthiness of the research findings, several verification techniques were employed(Morse et al., 2002). Data triangulation was conducted by comparing information obtained from multiple types of media sources, including news articles, blogs, and social media discussions. The researcher also applied theoretical triangulation by integrating concepts from Critical Discourse Analysis, media framing theory, and digital discourse studies. In addition, peer review and academic consultation were conducted during the analysis process to minimize subjective interpretation and improve analytical accuracy. Data verification techniques such as repeated reading, coding consistency checks, and cross-text comparison were also implemented to ensure the reliability and credibility of the findings. Through these procedures, the study aimed to produce valid, systematic, and critically grounded interpretations of AI narratives in online media discourse.

## 3. Results and Discussion

### *3.1 AI Narrative Patterns*

The analysis of online media texts revealed several dominant narrative patterns regarding artificial intelligence (AI)(Zhai et al., 2020). These narratives were consistently constructed through lexical choices, framing strategies, metaphors, and rhetorical expressions that shaped public understanding of AI technology. The findings indicate that online media does not merely provide neutral information about AI development; instead, it actively constructs ideological meanings and social perceptions concerning the role of artificial intelligence in contemporary society. Five dominant narratives emerged from the analyzed data: AI as technological progress, AI as economic opportunity, AI as human replacement, AI as ethical threat, and AI as a futuristic solution.

One of the most dominant narratives identified in online media discourse was the representation of AI as technological progress and innovation. Many news articles and technology publications framed AI as a revolutionary advancement capable of transforming human civilization. Media texts frequently used expressions such as “AI revolution,” “breakthrough innovation,” “smart technology,” and “the future of humanity” to describe the rapid development of artificial intelligence. This narrative emphasized efficiency, automation, speed, and problem-solving capabilities associated with AI systems. Online media often portrayed AI as an inevitable stage of technological evolution that would modernize industries, improve healthcare systems, optimize educational processes, and enhance global productivity. Such representations contributed to the construction of technological optimism, where AI was positioned as a symbol of progress and modernization.

In addition to technological advancement, AI was also strongly represented as an economic opportunity(Aghion et al., 2017). Online media discourse frequently highlighted the economic potential of AI in business, finance, marketing, and industrial sectors. Articles discussing AI startups, investment growth, digital transformation, and market competitiveness reinforced the perception that AI could generate new economic possibilities and increase corporate profitability. Media narratives often associated AI with terms such as “economic



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growth," "business efficiency," "competitive advantage," and "digital economy." These linguistic patterns reflected capitalist and market-oriented ideologies in which AI was framed as a strategic tool for economic expansion and productivity enhancement. Furthermore, online media frequently showcased successful technology companies and entrepreneurs as symbols of innovation, thereby reinforcing the idea that AI is essential for economic survival in the digital era.

However, the findings also revealed a contrasting narrative portraying AI as a threat to human employment and labor stability. Many online discussions emphasized concerns regarding automation replacing human workers across various professions. Media texts often used alarming phrases such as "machines replacing humans," "job extinction," "automation crisis," and "the end of traditional work." These narratives were particularly visible in discussions related to manufacturing industries, customer service, journalism, transportation, and creative sectors increasingly affected by AI technologies. The representation of AI as human replacement reflected broader societal anxieties regarding unemployment, economic inequality, and labor displacement caused by technological automation. In this context, online media played a significant role in amplifying fears about the uncertain future of human labor in an AI-driven society.

Another dominant narrative identified in the data was AI as an ethical threat. Online media frequently discussed ethical concerns related to privacy violations, surveillance systems, misinformation, algorithmic bias, and lack of accountability in AI technologies. News articles addressing facial recognition systems, deepfake technologies, and AI-generated misinformation often employed fear-inducing language to highlight the dangers of uncontrolled technological development. Expressions such as "digital surveillance," "loss of privacy," "algorithmic discrimination," and "AI manipulation" reflected media attempts to construct AI as a potentially dangerous force capable of threatening democratic values and human rights. This narrative demonstrated how online media contributes to moral panic and ethical debates surrounding AI implementation. At the same time, it revealed increasing public concern regarding the social consequences of advanced technological systems.

Furthermore, online media also represented AI as a futuristic solution to global challenges. In this narrative, AI was framed as an intelligent system capable of solving complex human problems, including climate change, healthcare crises, education inequality, and cybersecurity threats(Yigitcanlar et al., 2020). Media discourse frequently described AI using utopian expressions such as "building a smarter future," "technology for humanity," and "AI-powered solutions." This representation constructed AI as a transformative force that could improve the quality of life and create more sustainable societies. The futuristic solution narrative reflected strong techno-utopian ideologies in which technology is perceived as the primary answer to social, political, and economic problems. Such narratives often minimized the potential risks and limitations of AI while emphasizing its transformative possibilities.

The coexistence of these narratives demonstrates that online media discourse surrounding artificial intelligence is highly dynamic and ideologically contested. On one hand, AI is celebrated as a symbol of innovation, progress, and economic advancement. On the other hand, it is simultaneously portrayed as a source of fear, ethical danger, and social uncertainty. This dualistic representation indicates that online media functions not only as a channel of information dissemination but also as a powerful institution that shapes public consciousness and ideological perspectives regarding technology. Through selective framing, lexical choices, and discursive strategies, online media constructs particular understandings of AI that influence how society interprets technological change and its implications for the future.

### *3.2 Linguistic and Discursive Features*

The analysis of online media texts revealed that linguistic and discursive features played a significant role in constructing public perceptions of artificial intelligence (AI). Media

discourse surrounding AI was shaped through strategic lexical choices, metaphors, headlines, modality, sentence structures, emotional expressions, and persuasive language. These linguistic elements were not neutral but functioned ideologically to frame AI either positively as a symbol of innovation and progress or negatively as a threat to humanity, labor, and ethics. Through language, online media actively influenced how audiences interpreted technological developments and their social implications.

One of the most dominant linguistic features identified in the analyzed texts was the use of specific lexical choices to construct ideological meanings regarding AI(Van Dijk, 2005). Online media frequently employed words associated with innovation, transformation, and advancement, such as "breakthrough," "revolutionary," "intelligent systems," "automation," "digital transformation," and "future technology." These lexical choices framed AI as a sophisticated and inevitable technological development that represents modern progress. Expressions such as "AI revolution" and "smart future" were repeatedly used to promote optimistic perceptions of AI as a transformative force capable of improving society and human productivity. Such vocabulary reflected techno-optimistic ideologies that positioned AI as a solution to contemporary global challenges.

At the same time, media discourse also utilized negative lexical choices that emphasized fear, uncertainty, and social disruption. Terms such as "AI takeover," "automation threat," "job destruction," "surveillance technology," and "machine dominance" constructed AI as a dangerous force that could destabilize social systems and replace human roles. The phrase "machines replacing humans" frequently appeared in headlines and articles discussing labor automation and unemployment. These lexical patterns contributed to public anxiety regarding the potential consequences of AI development. The contrast between positive and negative lexical choices demonstrated the ideological tension within online media narratives, where AI was simultaneously celebrated and feared.

Metaphorical language was another important discursive feature found in the analyzed texts(Musolff, 2012). Online media frequently used metaphors to simplify complex technological concepts and make AI more understandable to audiences. AI was often metaphorically represented as a "brain," "digital assistant," "intelligent machine," or "thinking system," which humanized technological systems and attributed human-like characteristics to AI technologies. In some cases, media discourse portrayed AI as a "double-edged sword," emphasizing both its benefits and risks. Other metaphors such as "AI race," "technological arms race," and "battle for AI supremacy" reflected competitive and geopolitical narratives surrounding global technological dominance. These metaphors not only simplified technical concepts but also reinforced ideological assumptions about power, competition, and control in the digital age.

Headlines also played a crucial role in shaping audience interpretation of AI narratives. Many online media headlines employed sensational and emotionally charged language to attract public attention and increase reader engagement. Headlines such as "AI Will Replace Millions of Jobs," "The Rise of Intelligent Machines," "Can AI Control Humanity?" and "The Future Belongs to Artificial Intelligence" reflected dramatic framing strategies commonly used in digital journalism. Sensational headlines often exaggerated either the promises or dangers of AI to generate emotional reactions and online interaction. This practice demonstrated how online media strategically constructs discourse to maximize audience engagement while simultaneously shaping public attitudes toward AI technologies.

The use of modality in online media discourse further revealed the ideological positioning of media texts regarding AI(Tanveer et al., 2020). Modal verbs such as "will," "can," "may," "might," and "could" were frequently used to express predictions, possibilities, and uncertainties concerning the future of artificial intelligence. Statements such as "AI will transform the global economy" or "AI could replace human workers" reflected strong



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predictive modality that positioned AI development as unavoidable and inevitable. Meanwhile, expressions such as "AI may threaten privacy" or "AI might increase social inequality" indicated uncertainty and caution regarding the long-term social consequences of technological advancement. The use of modality allowed media institutions to construct authority and credibility while simultaneously influencing public expectations and anxieties about the future.

Sentence structures within AI-related media texts also contributed to discursive meaning construction. Active sentence structures were commonly used to emphasize AI agency and technological power. For example, sentences such as "AI transforms industries," "Algorithms detect human behavior," and "Machines learn independently" positioned AI systems as active actors capable of autonomous action. This linguistic strategy reinforced the perception that AI possesses agency similar to human intelligence. In contrast, passive sentence structures were often employed when discussing ethical failures or technological risks, such as "personal data was collected" or "workers were replaced by automation." Passive constructions sometimes obscured responsibility and minimized accountability regarding the social impacts of AI technologies.

The analysis additionally revealed the frequent use of emotional language in online media narratives. Emotional expressions such as "fear," "hope," "danger," "uncertainty," "excitement," and "anxiety" were repeatedly associated with AI discourse. Positive emotional language emphasized optimism and progress, while negative emotional language intensified moral panic and public concern. For example, phrases such as "a brighter future with AI" created hopeful emotional responses, whereas expressions like "AI threatens human survival" amplified fear and insecurity. Emotional language functioned as a persuasive mechanism designed to influence audience attitudes and emotional engagement with AI-related issues.

Persuasive language was also highly visible in the analyzed texts. Online media often used rhetorical strategies to convince audiences to support or distrust AI technologies. Persuasive expressions such as "embracing AI innovation," "preparing for the future," and "adapting to digital transformation" encouraged acceptance of technological change. Conversely, warnings such as "society must regulate AI" and "humans must maintain control over machines" promoted cautious attitudes and ethical awareness regarding AI implementation. These persuasive strategies reflected broader ideological struggles over technological governance, corporate power, and societal adaptation in the digital era.

### *3.3 Media Framing of AI*

The analysis of online media discourse revealed that artificial intelligence (AI) is framed through multiple perspectives that shape public understanding of technological development. Media framing refers to the process by which media institutions select, emphasize, and organize information in ways that influence audience interpretation of particular issues(D'Angelo, 2017). In the context of AI, online media did not present technology in a completely neutral manner; instead, AI was framed positively, negatively, and sometimes ambiguously depending on the ideological orientation, communicative goals, and institutional interests of the media platform. The findings demonstrated four dominant framing patterns within online media discourse: optimistic framing, fear-based framing, commercialization framing, and ethical framing.

One of the most dominant representations identified in the analyzed texts was optimistic framing. In this perspective, AI was portrayed as a symbol of innovation, technological advancement, and societal progress. Online media frequently emphasized the benefits of AI in improving efficiency, productivity, healthcare systems, education, and business operations. AI was often described as a revolutionary technology capable of transforming human civilization and creating a more advanced future. Headlines and articles commonly employed positive

expressions such as “AI revolution,” “smart future,” “digital transformation,” and “technology for humanity” to construct optimistic narratives regarding artificial intelligence.

This optimistic framing reflected techno-utopian ideologies that positioned technological innovation as the primary solution to contemporary social and economic challenges. Online media often highlighted success stories involving AI applications in medicine, transportation, finance, and communication technologies(Fernandez-Luque & Imran, 2018). For example, AI systems capable of detecting diseases, automating industrial processes, and enhancing educational accessibility were frequently presented as evidence of technological progress and human achievement. Such framing encouraged audiences to perceive AI as a beneficial and inevitable component of modern society. In addition, optimistic framing frequently minimized discussions regarding potential risks and ethical concerns, thereby reinforcing public enthusiasm toward technological adoption.

However, alongside positive representations, fear-based framing also emerged strongly within online media discourse. This framing emphasized the potential dangers, threats, and uncertainties associated with AI development. Media texts frequently discussed issues such as job displacement, automation, surveillance, misinformation, cybersecurity risks, and loss of human control over intelligent systems. Expressions such as “AI takeover,” “machines replacing humans,” “automation crisis,” and “threat to humanity” reflected narratives designed to evoke fear and public anxiety regarding the consequences of artificial intelligence.

Fear-based framing was particularly visible in discussions surrounding labor transformation and ethical risks. Many articles warned that AI technologies could replace millions of workers across various industries, leading to unemployment and economic instability(Zemtsov, 2020). Other media narratives focused on the dangers of deepfake technology, data privacy violations, and autonomous decision-making systems that could potentially harm society. This framing often employed sensational language and dramatic headlines to attract public attention and increase audience engagement. As a result, AI was frequently constructed as a source of uncertainty and social disruption rather than merely a technological tool. Fear-based framing contributed to the development of moral panic and public skepticism regarding the rapid expansion of artificial intelligence.

Another dominant framing pattern identified in the study was commercialization framing. In this perspective, AI was primarily represented as a profitable economic commodity and strategic business investment. Online media frequently highlighted AI-related market growth, startup innovation, corporate competition, and financial opportunities associated with artificial intelligence technologies. News articles discussing AI investments, technology companies, and digital entrepreneurship often framed AI as an essential instrument for achieving economic success and market competitiveness.

Commercialization framing reflected capitalist ideologies embedded within digital media discourse(Preston & Silke, 2011). AI was commonly associated with terms such as “business efficiency,” “market innovation,” “competitive advantage,” and “economic growth.” Media narratives frequently focused on major technology corporations and their efforts to dominate AI development globally. Companies investing heavily in AI were portrayed as leaders of future economic transformation, reinforcing the perception that technological dominance is closely linked to economic and political power. Through commercialization framing, online media contributed to the normalization of AI as a market-driven technology shaped by corporate interests and global digital capitalism.

In addition to optimistic, fear-based, and commercialization framing, ethical framing also emerged prominently within the analyzed media texts. Ethical framing focused on the moral, social, and political implications of AI development and implementation(Ulnicane et al., 2021). Online media increasingly discussed concerns regarding privacy, algorithmic bias, accountability, surveillance, discrimination, and the responsible use of AI systems. Articles



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addressing facial recognition technology, AI-generated misinformation, and algorithmic decision-making often emphasized ethical dilemmas and the need for stronger technological regulation.

This framing reflected growing public awareness regarding the social consequences of artificial intelligence. Media discourse frequently questioned whether AI systems could operate fairly, transparently, and responsibly. Expressions such as "ethical AI," "responsible innovation," "digital rights," and "human-centered technology" illustrated attempts to frame AI development within moral and regulatory boundaries. Ethical framing encouraged audiences to critically evaluate not only the benefits of AI but also its broader implications for democracy, privacy, and human rights. Unlike optimistic framing, which focused primarily on technological benefits, ethical framing emphasized the importance of balancing innovation with accountability and social responsibility.

Interestingly, the findings revealed that many online media texts combined multiple framing strategies simultaneously. Some articles initially framed AI positively as an innovative solution but later introduced ethical concerns or fears regarding automation and surveillance. This combination created complex and sometimes contradictory narratives that reflected broader societal debates surrounding artificial intelligence. The coexistence of optimistic and fear-based framing demonstrated that AI discourse in online media is ideologically contested and continuously negotiated through language and representation.

### *3.4 Social Implications*

One of the most important implications identified in this study is the impact of media discourse on public trust in AI. Online media plays a central role in determining whether audiences perceive AI as beneficial, reliable, and trustworthy or as dangerous and unpredictable. Optimistic media narratives that emphasize innovation, efficiency, and technological advancement tend to increase public confidence in AI systems. News articles highlighting successful AI applications in healthcare, education, transportation, and business often encourage audiences to view AI as a positive force capable of improving human life and solving complex societal problems. Such representations contribute to the normalization and acceptance of AI technologies within everyday social practices.

However, public trust in AI can also be weakened by negative and fear-based media narratives. Discussions concerning surveillance systems, algorithmic bias, misinformation, deepfake technologies, and data privacy violations often create skepticism and uncertainty regarding AI implementation. When online media repeatedly frames AI as a threat to human autonomy, employment, or democratic values, audiences may develop distrust toward technological systems and institutions responsible for AI development. This finding suggests that media discourse significantly shapes collective attitudes toward artificial intelligence and influences the degree of societal acceptance of technological innovation.

Another important implication relates to digital literacy. The increasing visibility of AI narratives in online media requires society to possess adequate digital literacy skills in order to critically interpret information about technology(Jandrić, 2019). The study found that media discourse often presents AI using complex terminology, sensational headlines, and simplified narratives that may distort public understanding of technological realities. As a result, audiences who lack digital literacy may struggle to distinguish between factual information, media exaggeration, speculative predictions, and ideological framing.

The findings indicate that digital literacy is essential for helping individuals critically evaluate AI-related information and understand the social implications of technological systems. Online media frequently simplifies AI discourse through dramatic metaphors such as "AI takeover" or "machines replacing humans," which may create misconceptions regarding the actual capabilities and limitations of artificial intelligence. Therefore, improving digital literacy is necessary to ensure that society can engage with AI discourse critically and



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responsibly rather than passively accepting media narratives. In this context, educational institutions, governments, and digital platforms play important roles in promoting technological literacy and critical media awareness.

The study also revealed that online media narratives contribute significantly to social anxiety surrounding artificial intelligence(D'alfonso et al., 2017). Fear-based framing and sensational reporting often intensify public concerns regarding automation, surveillance, ethical risks, and the uncertain future of human society. Many media texts portrayed AI as an uncontrollable force capable of replacing human intelligence, disrupting labor systems, and threatening social stability. Such representations contribute to collective fears about the future and create psychological uncertainty regarding technological transformation.

Social anxiety was particularly evident in discussions related to automation and employment. Media narratives emphasizing "job extinction," "automation crisis," and "human replacement" amplified concerns regarding economic insecurity and social inequality. Individuals working in industries vulnerable to automation may experience increased anxiety about career stability and future employment opportunities. In addition, discussions concerning AI surveillance technologies and data collection practices generated concerns about privacy, freedom, and individual autonomy. These findings demonstrate that media discourse not only informs audiences about technological development but also influences emotional responses and societal fears associated with AI expansion.

Labor concerns emerged as another major social implication identified in the study(Yawar & Seuring, 2017). Online media frequently framed AI as both an opportunity and a threat within labor and economic contexts. On one hand, AI was presented as a tool capable of improving productivity, efficiency, and economic growth. On the other hand, media discourse repeatedly emphasized the possibility of AI replacing human workers across various sectors, including manufacturing, customer service, transportation, journalism, and creative industries.

These narratives contributed to growing public debates regarding the future of work in an AI-driven economy. Concerns about unemployment, skill displacement, and economic inequality became central themes within online discussions(Preston & Silke, 2017). The findings suggest that media representations of AI significantly influence societal perceptions of labor transformation and shape expectations regarding future employment conditions. Furthermore, media discourse often reinforced the idea that workers must adapt to technological change by acquiring digital competencies and new technological skills in order to remain competitive in the evolving labor market.

In addition to labor-related concerns, the study found that online media narratives have increased ethical awareness regarding artificial intelligence. Ethical framing within media discourse encouraged audiences to critically reflect on issues such as privacy protection, algorithmic fairness, accountability, transparency, and human rights in AI development. Discussions regarding facial recognition systems, algorithmic discrimination, misinformation, and autonomous decision-making systems highlighted the importance of ethical governance and responsible innovation.

The increasing presence of ethical discourse in online media demonstrates that society is becoming more aware of the moral implications associated with technological advancement. Media narratives emphasizing "ethical AI," "responsible technology," and "human-centered innovation" encouraged public discussions about the need for regulation and accountability in AI systems. This ethical awareness is particularly important because AI technologies increasingly influence social decision-making processes in areas such as law enforcement, healthcare, education, and employment(Azad, 2018). The findings indicate that online media can function as a platform for promoting public debate regarding ethical standards and social responsibility in technological development.



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### *3.5 Comparison with Previous Studies*

The findings of this study demonstrate several similarities and differences when compared with previous research on artificial intelligence (AI) discourse, media framing, and Critical Discourse Analysis (CDA). Similar to earlier studies, this research found that online media constructs AI through competing narratives that simultaneously emphasize technological progress and social risk. However, this study also contributes new insights by critically examining how linguistic strategies, ideological framing, and discursive practices interact within contemporary online media environments, particularly during the rapid expansion of generative AI technologies.

One of the major similarities between this study and previous research can be seen in the representation of AI as a symbol of technological innovation and social transformation. Earlier studies by Dennis Nguyen and Erik Hekman (2022) found that online news discourse frequently framed AI as a revolutionary technology capable of transforming industries, economies, and social systems. Their findings highlighted the dominance of techno-optimistic narratives in media reporting about automation and digital transformation. Similarly, the present study identified optimistic framing as one of the dominant narrative patterns in online media discourse. AI was repeatedly represented through positive lexical choices such as "innovation," "digital transformation," and "smart future," which reinforced ideological assumptions about technological progress and modernization.

The findings of this study also align with research conducted by Igor Ryazanov, Carl Öhman, and Johanna Björklund (2024), who argued that media narratives surrounding AI became increasingly polarized following the emergence of generative AI technologies such as ChatGPT. Their study demonstrated that online media discourse shifted from primarily optimistic representations toward more complex narratives involving fear, uncertainty, and ethical concern. The present research similarly found that AI discourse in online media is characterized by ideological tension between optimistic and fear-based framing. While some media texts celebrated AI as a transformative solution, others emphasized threats related to automation, surveillance, and misinformation. This confirms that contemporary AI discourse is increasingly contested and shaped by competing social interests.

Furthermore, this study supports the findings of Brent Lucia, Matthew Vetter, and Varshil Patel (2025), who identified the growing presence of dystopian narratives in media discussions about generative AI. Their research emphasized that online media frequently employs fear-based rhetoric and sensational language when discussing AI risks(Zou, 2020). In the present study, similar linguistic patterns were identified through expressions such as "AI takeover," "machines replacing humans," and "automation crisis." These findings indicate that fear-based framing has become an important discursive strategy in contemporary media representations of artificial intelligence. Both studies demonstrate that media discourse often amplifies public anxiety regarding technological change through emotionally charged language and dramatic headlines.

The present study also corresponds with previous CDA research emphasizing the ideological dimensions of technology discourse. Amin Khan and Haider Ali (2024), for example, argued that AI-mediated communication contributes to the reproduction of ideological power structures within digital environments. Their corpus-assisted CDA study revealed that algorithmic systems influence language use, identity construction, and social interaction in online spaces. Similarly, this research found that online media discourse surrounding AI reflects broader ideological concerns related to capitalism, technological dominance, and corporate power. Commercialization framing identified in this study demonstrated how AI is frequently represented as a strategic economic commodity linked to market competition and digital capitalism.



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In addition, the findings support previous research on ethical discourse concerning AI technologies. Victoria Imariaikowa Emasealu (2024) found that media narratives increasingly emphasize ethical concerns such as privacy, surveillance, and algorithmic bias in discussions about AI implementation. The present study similarly identified ethical framing as one of the dominant discursive patterns in online media. Media texts frequently highlighted issues involving data privacy, misinformation, accountability, and responsible AI governance. These findings indicate that ethical awareness has become a central component of contemporary AI discourse and reflects growing societal concern regarding the social consequences of technological development.

Despite these similarities, the present study also reveals several differences compared with earlier research. Many previous studies focused primarily on media framing, public opinion, or technological narratives without conducting detailed linguistic analysis of discourse structures(Macnaghten et al., 2019). In contrast, this study applied a more comprehensive Critical Discourse Analysis approach by examining lexical choices, metaphors, modality, sentence structures, emotional language, and persuasive strategies within AI-related media texts. This multidimensional linguistic analysis provided deeper insights into how online media constructs ideological meanings and shapes audience perceptions through specific discursive mechanisms.

Another important difference lies in the focus on online media as a dynamic digital communication environment. Earlier studies often concentrated on traditional news media or isolated social media platforms, whereas the present research analyzed multiple forms of digital discourse, including online news articles, blogs, technology publications, and social media discussions. This broader scope allowed the study to capture the complexity and diversity of AI narratives circulating across contemporary online media ecosystems. The findings demonstrate that AI discourse is increasingly influenced by algorithmic visibility, audience engagement, and participatory digital communication practices.

Furthermore, while many earlier studies emphasized either positive or negative representations of AI separately, this study found that online media frequently combines multiple framing strategies within the same discourse. Some articles simultaneously promoted AI innovation while also warning about ethical risks and labor displacement. This overlapping framing pattern suggests that media discourse surrounding AI is not entirely polarized but rather characterized by discursive hybridity and ideological negotiation. Such findings contribute to a more nuanced understanding of how online media constructs technological narratives in contemporary society.

## 4. Conclusion

This study examined the representation of artificial intelligence (AI) in online media using a Critical Discourse Analysis (CDA) approach. The findings revealed that online media constructs AI through multiple dominant narrative patterns, including AI as technological progress, economic opportunity, human replacement, ethical threat, and futuristic solution. These representations demonstrate that media discourse surrounding AI is highly dynamic and ideologically contested. On one hand, AI is portrayed as an innovative technology capable of improving efficiency, productivity, and human life. On the other hand, AI is also framed as a source of fear, uncertainty, surveillance, and labor disruption. Such contrasting representations indicate that online media does not merely report technological developments objectively but actively shapes public understanding and interpretation of artificial intelligence. The study also identified several dominant ideologies embedded within online media narratives. Techno-optimistic ideology was strongly reflected in discourses emphasizing innovation, modernization, and digital transformation, where AI was positioned as a solution to global challenges and a symbol of future progress. In contrast, fear-based and



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dystopian ideologies emerged through narratives highlighting automation threats, ethical risks, and social instability caused by AI development. Additionally, commercialization ideology was evident in media discourse framing AI as a profitable economic commodity associated with corporate competition, market expansion, and digital capitalism. Ethical ideology also appeared prominently in discussions concerning privacy, accountability, algorithmic bias, and responsible AI governance. These findings demonstrate that AI discourse is closely connected to broader social, economic, and political power structures. Furthermore, this study found that discourse significantly influences public understanding of artificial intelligence. Through lexical choices, metaphors, headlines, modality, emotional language, and persuasive strategies, online media constructs specific perceptions regarding the benefits, risks, and future implications of AI technologies. Positive framing encourages public trust and technological acceptance, while fear-based framing contributes to social anxiety and skepticism toward AI systems. The application of Critical Discourse Analysis contributed significantly to uncovering hidden meanings, ideological assumptions, and power relations embedded within online media narratives. By analyzing textual structures, discursive practices, and broader social contexts, CDA enabled a deeper understanding of how language constructs social realities regarding artificial intelligence. Despite these contributions, this study has several limitations. The research focused primarily on English-language online media texts published within a specific period and therefore may not fully represent global AI discourse across different cultural and linguistic contexts. Future research is also recommended to explore the evolving discourse surrounding generative AI technologies, algorithmic governance, and AI ethics in emerging digital environments. Comparative studies examining differences between traditional media and social media discourse would provide valuable insights into changing patterns of technological representation.

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