Responsibility and Mission of News Media in AI Era

Xinhua Institute

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Media intelligence is developing rapidly around the world.With a stronger sense of mission and urgency in bolstering our capability to guide public opinion, we need to make breakthroughs in the independent innovation of key technologies, exploring the application of AI in news gathering, generating, distribution, reception and feedback. The use of algorithms must be aligned with mainstream values for better guidance of public opinion.[①]

——Xi Jinping

①Part of the speech at the 12th group study session of the Political Bureau of the 19th CPC Central Committee (January 25, 2019)

Introduction

The rapid development and wide application of generative AI technology have triggered an AI boom sweeping the world, with news media once again embracing opportunities for transformation and development. The mysterious "technological singularity" in science fiction is moving from imagination to reality, leading mankind into a new space-time full of unknowns. The era of "smart media" seems to have arrived.

How AI will reshape the news media industry is still an unknown mystery as the development of this technology is still fraught with uncertainty. Just like the previous revolutions in communication technology, the development of AI cannot escape from the "Collingridgedilemma". The pros and cons of the emerging technology are still in the "black box" until they are tested in practice.

There is broad consensus within the international community on building an effective governance mechanism to promote AI for the benefit of mankind. In October 2023, Chinese President Xi Jinping put forward the Global AI Governance Initiative at the Third Belt and Road Forum for International Cooperation. The Initiative states that AI governance is a matter of shared future for humankind and a common issue for all countries. World peace and development are facing diverse challenges. Against this backdrop, all countries should be committed to the principle of equal emphasis on development and security, and forge consensus through dialogue and cooperation; they should build an open, fair and effective governance mechanism, promoting AI for the benefit of humankind, and contributing to the building of a community with a shared future for humanity. Focusing on the development, safety and governance of AI, the Initiative sets forth basic principles such as "putting people first" and "intelligence for good", offering a Chinese perspective fortackling the challenges of AI governance.

What opportunities and challenges do news media face in the era of AI? How should news media fulfill their duties and missions to promote intelligence for good? To explore these questions, the research team at New China Research (NCR), the think tank of Xinhua News Agency, conducted a questionnaire survey in Chinese, English and French for global news media organizations in 2024, gathering 1,094 valid questionnaires. Participants from 53 countries and regions, including newspapers, periodicals, broadcasting and television stations, news agencies, websites and mobile application service providers. Additionally, the teamvisited major mainstream media outlets, technology companies and research institutes around the world to conduct in-depth investigations into the opportunities, challenges, responsibilities and missions of news media in the AI era. Based on the research data and interview results, the group conducted a rigorous qualitative and quantitative analysis and, after extensive discussions, produced the report titled "The Responsibility and Mission of News Media in the Era of Artificial Intelligence".

The report found that the majority of global news media (66%) held a positive view

on the impact of generative AI on the industry. Most respondents (67.6%) had already experienced changes brought about by AI and more than half of (51.2%) of them had begun to implement AI technologies. Media organizations primarily expected generative AI to enhance the timeliness (74.6%) and productivity (74.4%) of news reporting. However, they also expressed concerns about the credibility risk brought about by AI, particularly regarding the "distortion and inaccuracy of news clues and materials" (76.4%). Additionally, a significant majority of news media (85.6%) believed that the application of generative AI required better regulation.

According to the report, AI is driving a new wave of productivity in news mediacreating advanced productive forces across content collection, production, distribution, and evaluation. It empowers both media organizations and consumers with enhanced experiences that transcend time and space, integrating virtual and real-world interactions, and facilitating human-machine communication. Additionally, AI is creating new forms of businesses models, including a media-centric approach for everything, platform-based media, and digitalized and intelligent industry.

The report suggests that the uncertainty of AI and its misuse have given rise to multiple risks and challenges. False information has escalated in scale, form and distribution, triggering a global crisis of authenticity. Additionally, the technology's limitations and the users' private interests have created a "collusion" effect, polluting the public opinion and negatively affecting individual perceptions and societal discourse. This situation has intensified international confrontations of information. Furthermore, widespread value disputes and ethical dilemmas have put AI in a dilemma between development and governance. The "intelligence divide" may further widen the gap between people, urban and rural areas, and between the North and the South, promoting technological hegemony and exacerbating global development imbalances.

The report proposes that news media, by shouldering social responsibilities and committing to a"people-first" approach while promoting "intelligence for good", will fulfil its duties in the era of AI in four aspects: accelerating intelligent initiativesto enhance media value, prioritizing ethical use to establish robust standards, shouldering social responsibilities to optimize the cognitive environment, and fostering dialogue and cooperation to improve global governance. In this way, powerful media forces will unite to build a community with a shared future and contribute to a better world.

Part One
Opportunities: AI Empowers Media Development

We need to seize the opportunities that arise from the integrated digital, networked, and smart development. Artificial intelligence should be utilized in reforms to enhance quality, efficiency, and growth drivers, ultimately boosting the total factor productivity.[①]

——Xi Jinping

A new generation of artificial intelligence is thriving worldwide, injecting new momentum into economic and social development and profoundly changing people's work and life[②]. In the news media sector, the emergence of intelligence, along with technologies such as 5G, big data, cloud computing, the Internet of Things, and blockchain, has ignited a new wave of media revolution. As the transformation brought about by AI gradually unfolds, the news media sector is presented with opportunities for new production drivers, enhanced user experiences, and promising prospects for industries.

I. New Drivers of Production Capacity

At present, AI is experiencing an explosive growth, with continuous breakthroughs in the application of algorithm recommendations, voice interaction, knowledge Q&A, and image generation. The wave of generative AI is spreading globally. At the end of 2022, OpenAI's generative AI ChatGPT made its debut. In 2024, the text-to-video model Sora once again captivated the world. Meanwhile, multi-modal and vertical domain large models emerged around the globe, signaling an accelerated trend of AI development worldwide.

The booming surge of AI technology offers a new driver of production for news media. Media outlets, both at home and abroad, are seizing this technological opportunity, striving to become "early adopters" of AI. A study conducted by a research team from

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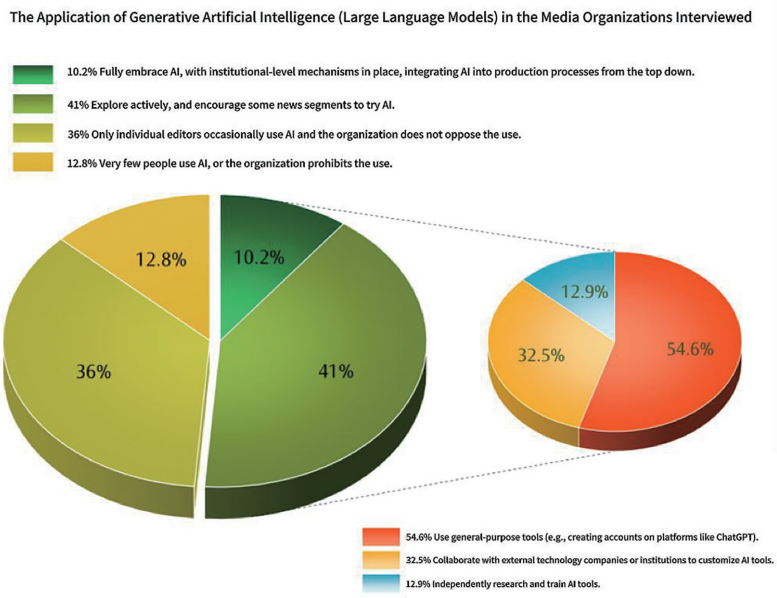
① Speech at the ninth group study session of the Political Bureau of the 19th CPC Central Committee (October 31, 2018).
② Xi Jinping's congratulatory message to the 2018 World Artificial Intelligence Conference (September 17, 2018)

Xinhua News Agency shows that 10.2% of media organizations worldwide have fully embraced AI, implementing institutional mechanisms to integrate AI into their production processes from the top down. Additionally, 41.0% of media organizations are actively exploring the application of AI technologies, encouraging some news segments to try AI. AI has gradually become a vital enhancer for the news media sector, fostering new productive forces and enabling high-quality development.



1.Aggregating Information and Enriching Sources

The new generation AI technology automatically gathers background information, recommends news sources and contacts, and verifies them through precise search engines, analytical engines, and visualization tools, providing editors with more valuable news leads and diverse perspectives.

"Juicer", a news aggregation and content extraction system developed by the BBC, automatically collects content from various free news websites around the world. AI categorizes and tags news to provide journalists with news materials and topic suggestions. "NewsRadar", developed by the Xinhua News Agency, automatically issues early warnings for breaking news and predicts an event's popularity based on its nature and scale. "Blossomblot", a data analysis bot developed by the New York Times, forecasts the most suitable information to share on social media by analyzing articles on social platforms, assisting in the creation of "viral" contents.

2. Assisting Creation and Improving Quality

In the news creation process, intelligent creation platforms offermedia professionals enhanced knowledge support with "Knowledge Services + AI" model. Technologies

such as writing bots and AI creative assistants can perform tasks like voice-to-text transcription, automatic editing, subtitle generation, intelligent music matching, automatic translation, and converting text or images into videos. The in-depth application of AI frees media workers from repetitive and tedious tasks, allowing them to focus on content innovation and ingenuity.

Xinhua News Agency's "Yuanmao" metaverse system, powered by AIGC (AI-Generated Content), includes several production-assisting tools such as digital humans, Meta Cube, the JimuAIGC video production system and an immersive offline interactive space. The People's Daily launched the "Creative Brain AI＋" platform, which integrates nearly 20 intelligent tools, enabling the timely creation and rapid generation of multimodal new media products. This platform delivers a one-stop solution to the whole working procedure, including interviews, filming, live broadcasting, editing, and publishing. Additionally, the holographic recording glasses offer multiple features, including real-time facial recognition, AI voice interaction, and initiating live streaming in real time.

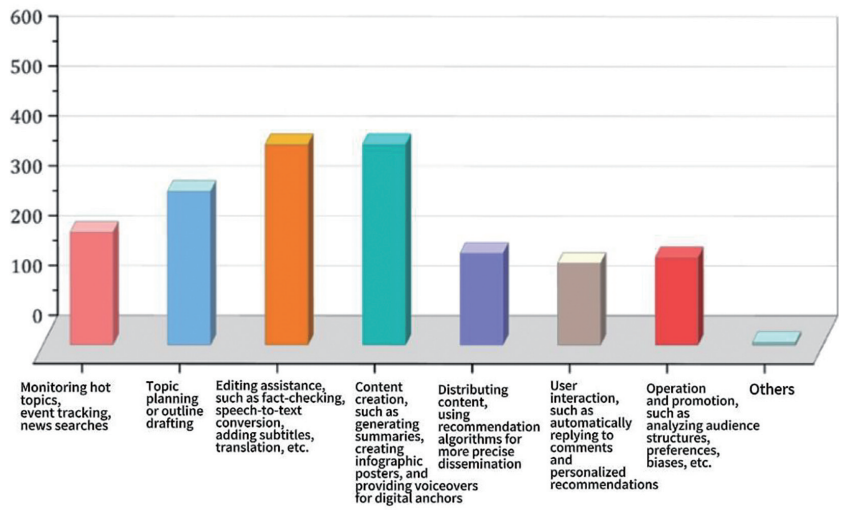
According to the study conducted by the research team, the top three application scenarios that media organizations explored are as follows:

1. Editing assistance, such as fact-checking, speech-to-text conversion, adding subtitles, and translation;

2. Content creation, such as generating summaries, creating infographic posters, and providing voiceovers for digital anchors;

3. Topic planning or outline drafting.

Application scenarios explored or intended to be explored by surveyed media organizations in the application of generative AI (large language models) at the institutional level:



3. Precise Profiling and Personalized Distribution

In content distribution, AI extensively leverages interconnected data to help media organizations gain deep insights, outline user profiles, and establish closer connections with users to achieve more accurate content delivery.

Today, personalized recommendations, powered by AI technology, have become the mainstream method of news distribution. Media recommendation algorithms rely not only on historical browsing records, but also on more precise data. The American news aggregation site BuzzFeed and the globally popular short-video platform TikTok have perfected user data analysis by considering metrics such as click frequency, time spent, and preferred content to guide content planning, operations, and promotion.

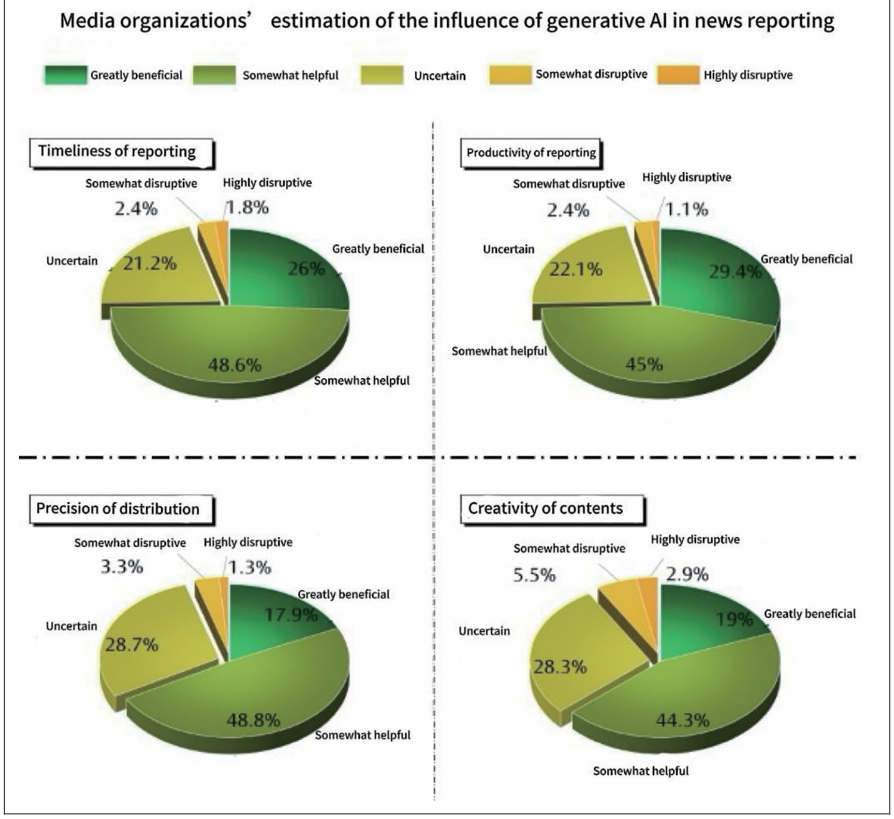
Furthermore, generative AI enables "point-to-point" information dissemination, allowing users to access specific content tailored to their needs in different scenarios. This is facilitated by the personalized "information assistant" embedded in various search engines and applications. The "point-to-point" distribution ensures intelligent delivery even without centralized platforms. Currently, companies like Microsoft, Google, and Baidu have already integrated generative AI into their search engines. The fusion of large language models with search engines may become a new source of traffic and a new channel for news distribution.

4. Scientific Evaluation and Efficient Management

AI technology evaluates communication effectiveness and precisely assesses data, thereby enhancing the management efficiency of media organizations. For example, by analyzing data such as user viewing time, click-through rates, and the number of shares, AI can quantify and evaluate content appeal. Sentiment analysis tools capture users' emotional responses during their interactions and monitor discussions on social media to gauge content impact. Observing user interactions, such as the number of comments, likes, dislikes, and reports, can evaluate the level of user engagement.

In the Washington Post's "Arc Publishing" newsroom, TV screens display real-time visualized data charts, showing the number of site logins, ranking of articles by readership, ranking of user-preferred authors, and the percentage of article types favored by readers. The UK Financial Times uses robots to check whether the sources cited in their reports are disproportionately represented by specific groups.

According to the study conducted by the research team, 74.6% of the surveyed media expected generative AI to help improve the timeliness of news reporting; 74.4% of respondents believed that generative AI would enhance the efficiency of news production; 66.7% of the surveyed media anticipated that generative AI would help improve the accuracy of news distribution, and 63.3% believed AI would enhance content creativity.



II. Enhanced User Experience

The deep integration of AI with news media empowers news dissemination and brings exciting experiences for consumers. Media consumption in the age of artificial intelligence will be a human-centered and all-connected new experience. The prospects of full-process media, holographic media, all-accessible media, and full-effect media are becoming more evident, revealingvast opportunities on the horizon.

1. Transcending Time and Space and Reaching Users Anytime, Anywhere

The wide spread application of artificial intelligence technology allows communica-

tion to transcend the limitations of time and space. News can reach users anytime, anywhere, and in any situation.

Intelligent media systems can capture users' immediate needs instantly by tracking the dynamic changes in user behavior, stance, and interests. When major news events occur, these systems can quickly identify and forward relevant information. Large models can supplement information based on known facts. They simulate the course of events and restore the news scene, representing news events concretely, offering users accurate and comprehensive information during the "golden time" (the critical period for information dissemination).

Intelligence-driven, context-aware, and personalized services can identify users' geographical locations and deliver content relevant to their daily lives. During the Paris Olympics, NBCUniversal launched Virtual Kiosk, a novel e-commerce advertising platform. This tool dynamically tailors advertising services to viewers based on their consumption habits while watching the games. In the future, increasingly sophisticated algorithms will be able to perceive users' diverse needs for information, products and services anytime and anywhere. Enhanced services will be available and properly presented to users anywhere.

2. Blending Reality and Virtuality for Immersive Experiences

AI combines with Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR), forming comprehensive, multi-sensory, and multi-dimensional communication scenarios. Immersive experiences are becoming more intelligent.

Holographic communication, enhanced by powerful algorithms and computing power, offers real-time presentation of high-fidelity digital images. Users can create virtual avatars that are proportional to themselves and realize real-time interaction in the virtual world through their digital twins. This not only creates more authentic emotional bonds between people but also allows users to create real-life experiences that are otherwise difficult to obtain firsthand. With AR, the New York Times simulated NASA's Mars mission, providing a more direct experience. The Times enabled audiences to review the whole Apollo 11 mission. Time magazine used AR panoramic technology to showcase the changes in the Amazon rainforest for users. China Central Television (CCTV) used Virtual Engine + XR + Virtual Studio Technology to achieve seamless transitions between indoor and outdoor scenes in reporting Typhoon Capricorn, enhancing the artistic expressiveness of the report and the effectiveness of information delivery.

The integration of AI with multimodal technology also enables the digital transformation of culture, region, tradition, and aesthetics, extensively applied in the dissemination of historical, cultural, and artistic information. By tapping the screen, users can simulate striking a virtual replica of the Marquis Yi of Zeng's Bianzhong, an ancient Chinese instrument, to appreciate the charm of the national treasure firsthand. Users can immerse themselves in the virtual Notre Dame Cathedral, where each brick, mural,

and carving have been meticulously recreated, experiencing the historical echoes and artistic essence of this world-class cultural heritage in a holographic and multi-sensory way.

3. Human–machine Communication for Meaningful Interactions

Media outlets use large models to provide information via human-like conversations. This breaks the traditional one-way communication model between media and audiences and enables two-way communication and interaction. Users can have a greater sense of participation in information acquisition. As machines continue to enhance their understanding of human psychology and emotional perception, AI will further drive the transition of media from physical media to psychological media, giving users emotional comfort and fulfillment during information acquisition.

Generative AI, as an intelligent agent, already exhibits a certain degree of personality in news activities. AI-based vertical applications, such as "News Butler" and "Information Companion", will possess stronger social intelligence and be able to customize functions based on defined roles, individual information, and personalized needs. As conversations progress, users will find that generative AI tools are becoming increasingly proactive in the interactions, AI may introduce new topics and provide unexpected additional information and emotional support, and users can refute or question AI responses, prompting AI to improve its answer. Through interactions, AI has transcended its role as a tool and acts as a copilot.

III. New Prospects for Business Forms

AI is a strategic technology that leads this round of technological revolution and industrial transformation, exhibitinga strong spillover effect as a "leading goose".[①] Driven by AI, the media industries in some countries and regions are gradually upgrading from a simple "plus AI" (AI as an auxiliary tool) to a new level of "AI plus" (AI as the core driver). In future, with the support of AI, the media industry is likely to accelerate toward a promising prospect of extensive mediatization, media platformization, and digitized and intelligent industries.

1. Extensive Mediatization

Emerging technologies represented by information technology and artificial intelligence are developing by leaps and bounds. It has greatly expanded the dimensions of time, space, and human cognition. Humanity is entering an era of human-machine-thing tripartite fusion that intelligently connects everything.[②] AI technology, along with

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① Speech by Xi Jinping at the ninth group study session of the Political Bureau of the 19th CPC Central Committee (October 31, 2018).

② Speech by Xi Jinping at the joint session of the 20th Meeting of the Members of the Chinese Academy of Sciences, the 15th Meeting of the Members of the Chinese Academy of Engineering and the 10th National Congress of the China Association for Science and Technology (May 28, 2021).

5G, the Internet of Things (IoT), big data, and cloud computing, is making extensive mediatization a reality. Information dissemination will break free from human limitations, achieving ubiquitous connections between people, people and objects, and among objects.

In the intelligence age of extensive mediatization, media are not only channels of communication, but also generators of expression. In the past, the evolution of communication technologies and the expansion of communication channels have ushered us into an era of mass media where everyone has a voice, yetmedia remains predominately human- dominated. With the empowerment of AI, information dissemination breaks free from human limitations, achieving ubiquitous connections between people, between people and objects, and among objects. Applications such as drones, cameras, and sensors enhance human perception by enabling information acquisition from remote distances. Generative AI and other technologies resemble human by possessing the ability to generate content. These intelligent agents, endowed with pan-media attributes, can effectively collaborate with humans.

In the current era of extensive mediatization, almost all intelligent devices serve as both content distribution and reception terminals and proactive entities for human-machine interaction, collaboration, and companionship. The communication potential of intelligent home appliances, intelligent vehicles, smart speakers, and smart watches is becoming increasingly prominent. Controlling and utilizing intelligent terminals and the data they collect will become a new competitive edge in the media industry and media ecosystem. In the future, human-machine integration and brain-computer interface technologies will further expand the breadth and depth of information dissemination and spiritual communication.

2. Media Platformization

Platforms, functioning as digital infrastructure, possess powerful technologies, extensiveuser bases, and the ability to connect different communities. Platforms have become a significant force in rebuilding communication power. With AI technologies, the possibilities and potential of media platformization are further expanded.

Media platformization means that technological innovation and user participation allow news media to rapidly disseminate information, deliver personalized recommendations, and offer diverse forms of expression. Information dissemination has become more convenient and interactive. By integrating the strengths of traditional and new media, multi-channel distribution, and comprehensive services, media platforms are reshaping their reach, content, business models and operational mechanisms.

The People's Daily app has undergone multiple revisions, evolving from a platform primarily focused on disseminating official and authoritative news into a comprehensive hub that offers a wide range of information and government services. The "People's Channel" ("Renmin Hao") hosts tens of thousands of accounts representing government agencies, media outlets, and independent creators. The platform uses amainstream

algorithm to aggregate and distribute a sea of information, ensuring that diverse and rich content reaches users directly.

In the process of media platformization, news media serve as a communication medium (content creation and operation organizations) and a technological solution(exerting influence on social relationships through data, algorithms, AI technology, etc.). News media also possess the attributes of commercial capital. They can distribute and redistribute market resources by aggregating and connecting these resources. In this way, intelligent media platforms can take more initiative in new communication scenarios, becoming the forefront of social information dissemination and a service carrier for various communities.

3. Digitized and Intelligent Industries

AI brings immense industrial opportunities and vast market prospects. China's New Generation Artificial Intelligence Development Plan proposes that by 2030, the scale of the AI core industry in China will exceed 1 trillion yuan, driving the related industry to exceed 10 trillion yuan. More and more news media are taking the lead in embracing, upholding, and seeking transformation and breakthroughs by adopting digital and intelligent technologies, transforming from traditional media into intelligent media.

Digital transformation signifies a shift in the media industry from a content-driven model to one that is driven by technology, capital, and content, among other factors. This transformation and upgrade can be seen in the close integration of content and technology, as well as in the reconstruction of the entire industrial chain. AI has profoundly reshaped the entire media industry chain and its relationships. The upstream content creators collaborate throughout the entire creative process, leading to more convenient and efficient content creation. The midstream media platforms strengthen partnerships with technology companies to build "intelligent middleware" platforms. This enhances overall production efficiency, connects broader social resources, and provides scientific and efficient technical solutions for media product creativity, content review, and more. The downstream terminal end prioritizes content distribution and promotion strategies, precisely targeting content to specific user groups to enhance dissemination effectiveness and user loyalty.

The upgrade and evolution of the media industry chain will further adjust and optimize the media industry structure, providing more possibilities for the traditional media industry to break through development bottlenecks and achieve higher-quality development. Beijing News, leveraging spatial roaming technology, has launched a visual product called Immersive Central Axis (AR+VR): A Panoramic Journey Through the Axis of the Capital. This product vividly recreates 15 heritage sites along Beijing's central axis, supporting cultural heritage preservation and the application for World Heritage status while unlocking commercial value through the development of derivative cultural and creative products. Using virtual design, AI digital humans, optical motion capture filming, and other technologies, Qilu Evening News launched the metaverse plat-

form "Yi Dian Tian Yuan", the Online memorial ceremony for the Confucius metaverse release conference, the Qilu International Auto Show metaverse exhibition hall, the metaverse hospital, and the comprehensive metaverse cultural community to explore new business models.[①] The future will see artificial intelligence technology unlock new possibilities, enabling AI- driven collaborations between media and other sectors to boost productivity and revenue.

①Feng Wenlu: The Practice of Digital Intelligence Transformation of Mainstream Media - An Analysis Based on the Collected Cases of China Media Intelligence, The Press, April 2024.

Part Two
Challenges: AI Creates Multiple Risks

The development of artificial intelligence, like any other technological advancement, is a "double– edged sword."[①]

— Xi Jinping

All technologies possess a dual nature, offering both potential benefits and harms. Renowned physicist Stephen Hawking cautioned that powerful artificial intelligence could be "either the best, or the worst thing, ever to happen to humanity". Given the inherent uncertainties and extensive applications of AI, its evolution not only empowers the news media, but also introduces a multitude of new risks.

I. Misinformation Triggers a Crisis of Trust

Trustworthiness is the lifeblood of journalism, facts its foundation, and falsehoods its nemesis.[②] The misuse and abuse of AI have led to the widespread and viral production and dissemination of misinformation. This phenomenon undermines the social trust essential tonews organizations and has sparked a global crisis in the credibility of the information environment.

1. Unprecedented Scale of Misinformation Production

The technical intervention of AI has lowered the barriers and costs associated with creating and spreading false information, leading to its rapid proliferation and generating multiple layers of "informational fog" that distort the perceptions of reality.

In a study focusing on a large AI language model, researchers prompted ChatGPT with conspiracy theories and fabricated narratives. Within seconds, it generated a substantial volume of seemingly convincing content, ranging from news articles and essays to television scripts, all entirely devoid of factual basis. As industry experts noted, "It could become the most powerful misinformation-spreading tool the internet has ever seen."

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①Xi Jinping's speech at the ninth group study session of the Political Bureau of the 19th CPC Central Committee (October 31, 2018).

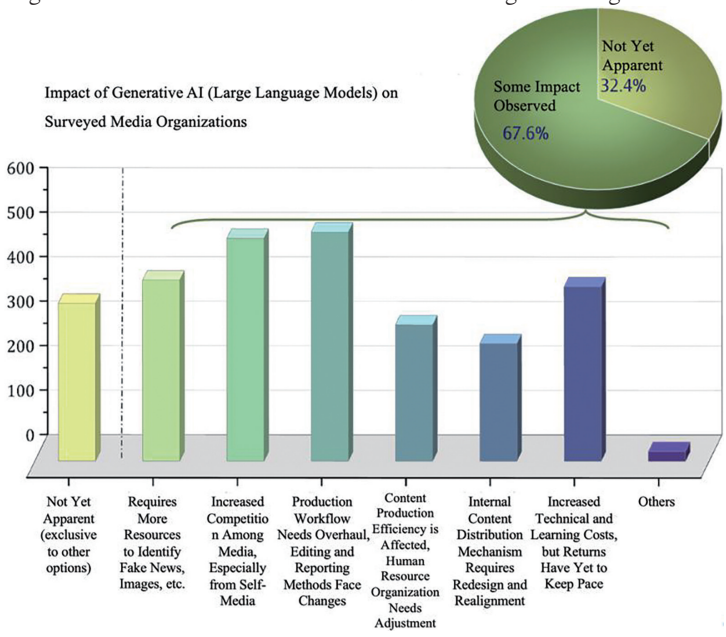
② Xi Jinping's speech at the Party's meeting on news and public opinion work (February 19, 2016).

A recent study found that generative AI has already triggered disruptions in the media industry. However, different media organizations perceive the impact with varying levels of urgency. While 32.4% of respondents reported that the influence of generative AI on their work remained "not yet apparent," 67.6% observed significant transformations underway. The top three areas of concern are:

1. Production Process Needs Overhaul: The work patterns of editors and journalists are undergoing rapid changes.

2. Heightened Competition from Other Media Outlets: Particularly from self-media and other independent content creators.

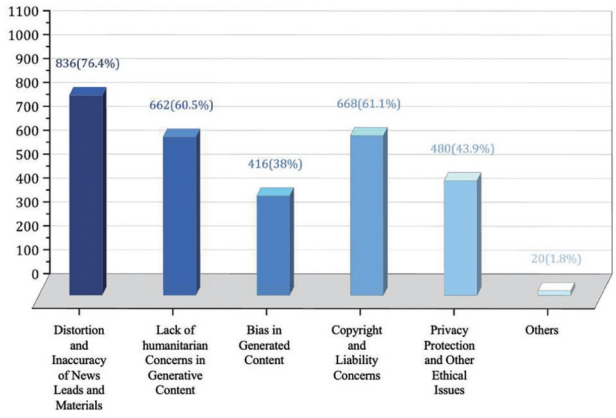
3. Increased Effort Needed to Combat Misinformation: More resources needed to distinguish genuine news from fabricated content, including fake images.



Survey data from various countries indicates that AI has become a potent driver of misinformation proliferation. A report titled *Demystifying AI Rumors: A Comprehensive Analysis of Dissemination Paths and Governance Strategies*, published by Tsinghua University's New Media Research Center in April 2024, highlights the rapid growth of AI-generated rumors due to the improper use of AI tools. Over the past six months, the volume of AI misinformation surged by 65%, with economic and business-related rumors witnessing an alarming growth rate of 99.91%. Similarly, a report released by a U.S. news credibility assessment and research organization at the end of 2023 revealed a dramatic rise in AI-driven fake news websites which had jumped from 49 to over 600 in just seven months. "AI is fast becoming the next 'super-spreader' of misinformation, " the report warned.

The survey also found that most media organizations are adopting a cautious approach to generative AI, primarily concerned that it could undermine their credibility. When asked "What challenges related to generative AI has your media organization encountered or is expected to face?" a significant 76.4% of respondents expressed concern about the "distortion and inaccuracy of news leads and materials", which far exceeded the second most cited issue, "copyright and liability concerns" (61.1%).

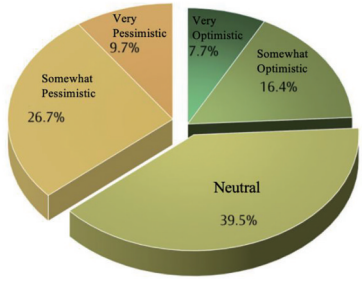
Issues Encountered or Expected by Surveyed Media Organizations When Using Generative AI:



Additionally, regarding the question of whether the integration of generative AI into the media industry will enhance the credibility and reliability of the information environment over the next 3 to 5 years,36.4% of respondents held a pessimistic outlook, which is 12.3 percentage points higher than the 24.1% who held an optimistic view. 39.5% respondents remained neutral.

Trust and authenticity are the cornerstones of journalism. Therefore, it can be inferred that, in the short term, most media organizations may permit generative AI to play only a limited, auxiliary role in content production.

As generative AI integrates with the media industry, surveyed media organizations' predictions for the credibility and reliability of the information environment over the next 3-5 years:



The rise of AI-fueled misinformation has raised global concern and awareness. Both Merriam-Webster and the Cambridge Dictionary selected "Authentic" and "Hallucinate" as their Words of the Year for 2023, respectively, reflecting the broader authenticity crisis sparked by AI. In the World Economic Forum's Global Risks Report 2024, AI-generated disinformation and misinformation ranks as the top short-term global risk, outpacing critical challenges such as climate change, warfare, and economic stagnation.

2. "Deepfakes" A More Deceptive Threat

AI's multimodal capabilities have significantly diversified the forms of misinformation, making it more difficult for the general public to detect. One prominent example is the rise of "deepfakes," a cutting-edge technology that goes beyond traditional text-based disinformation. Deepfakes can manipulate or fabricate images, voices, and videos to produce highly realistic yet misleading multimedia content.

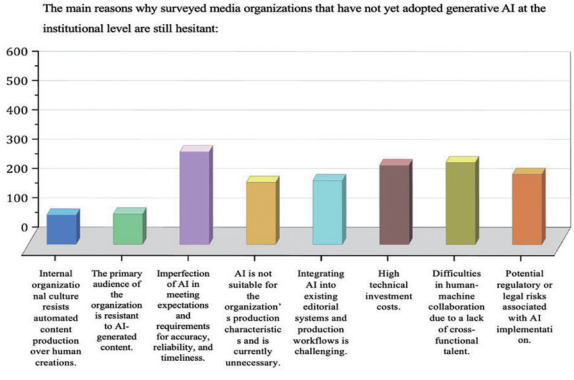
With deepfake technology maturing and becoming more accessible, scenarios that were once only seen in blockbuster films can now be generated with just a few clicks. Some fabricated content goes beyond mere "misattribution" or "exaggeration," creating entirely fabricated events from scratch. This extreme deceptiveness has fueled social crimes such as telecom fraud and the creation of synthetic pornographic videos, making it increasingly difficult to discern real news from fake. In recent years, various deepfake videos targeting public figures have repeatedly triggered public outcries. At the end of 2023, criminals used deepfake technology to alter the videos of Singapore's former Prime Minister Lee Hsien Loong, including his National Day Rally speech and an interview with a CGTN host, to promote a cryptocurrency investment scam.

The survey found that among media organizations still hesitant to fully embrace generative AI, the top three hindrances were:

AI has its own shortcomings, such as failing to meet expectations for accuracy and reliability in content generation.

Human-machine collaboration faces challenges, particularly due to a shortage of comprehensive talent for effective integration.

The high costs associated with technical investments.



Growing concerns over deepfake technology have also heightened public awareness of the risks posed by misinformation. This, in turn, has led to increased skepticism toward all information sources, including traditional news outlets, thereby further eroding overall social trust. According to Reuters' 2023 Digital News Report, only 40% of respondents indicated trust in news reports, a decline partially attributed to the spread of deepfakes and similar technologies.

3. "Simulated Dissemination" – Enhanced Concealment

AI has not only accelerated the proliferation of misinformation at the production level, but also provides more powerful tools for its dissemination. Represented by "social bots," a new generation of "internet trolls" has infiltrated major social media platforms worldwide, becoming omnipresent "invisible viruses" on the web.

"On the internet, nobody knows you're a dog." This phrase from *The New Yorker* years ago became widely known as the internet expanded. In the AI era, an increasing number of intelligent large models have passed the Turing Test, a benchmark designed to distinguish human behavior from machine activity. As a result, it is becoming increasingly difficult to discern whether one is interacting with a human or a machine online, leaving people unable to identify the true entities or motives behind each piece of information.

As an intelligent agent operating on social media platforms, "social bots" can automatically generate content based on the intentions of their operators, mimicking the status and behavior of real human users to engage in interactions. These bots can create "fake popularity" and "artificial consensus." Unlike traditional "internet trolls" which rely on human manipulation through anonymous accounts, "bot armies" composed of social bots can generate personalized viewpoints and operate continuously 24/7, consistently building and reinforcing their "persona." This makes the spread of misinformation more covert and difficult to detect.

In late August 2022, the Stanford Internet Observatory (SIO) and social platform analysis firm Graphika jointly released a report, revealing how the U.S. had leveraged social media to manipulate global narratives related to Xinjiang. Social bots played a key role in this effort by using tactics such as generating AI-created profile pictures, posing as "independent" news organizations and creating trending hashtags to spark discussions.

II. Technology Misuse Disrupts Public Opinion

Establishing a sound public opinion environment is crucial for effective governance and national stability.[①] A secure, peaceful, and transparent international public opinion space is also vital for fostering global cooperation and development. The pervasive appli-

① Xi Jinping's speech during his meeting with representatives of the 9th Council of the All-China Journalists Association and winners of the China Journalism Award and the Changjiang Taofen Award (November 7, 2016).

cation of artificial intelligence in information dissemination has introduced significant variables into the global public opinion landscape, generating new risks and challenges across individual, societal, and international dimensions.

1. Algorithmic Bias and Its Influence on Individual Cognition

As the primary actors within the public opinion framework, individuals play a key role in shaping this environment. However, the inherent biases embedded in data and algorithms, along with the phenomenon known as the "filter bubble," pose challenges to independent, rational, and healthy cognitive development and value formation.

Due to the characteristics of deep learning, large language models inevitably inherit stereotypes and value biases present in their training data and the designs of their human creators. Without appropriate checks, these overt and covert biases could result in scenarios where AI systems exert significant control over human thought. As illustrated in Liu Cixin's *The Three-Body Problem*, advanced civilizations imprint beliefs into individual consciousness through technology. While artificial intelligence cannot directly influence the human brain yet, it has already permeated various aspects of social information flow. By leveraging the sheer volume of data and the accumulation of time, AI can gradually dominate social consciousness, ultimately facilitating value transmission to users and even eroding their cognitive frameworks.

Even when AI systems operate under the principle of serving humanity, their reliance on personalized content delivery can limit users' cognitive horizons, exacerbating issues such ascognitive narrowing, rigid thinking, and group polarization. Particularly in the media landscape, where attention is the object of fierce contest, users often gravitate toward content that is visually striking or emotionally resonant. To cater to these preferences, AI may prioritize such content, thereby sidelining more substantive and valuable information.

2. Machine Posters Manipulating Social Opinion

With the support of artificial intelligence technology, the methods of opinion manipulation are constantly emerging and tools are continuously upgrading, leading to a more complex and murky public opinion ecosystem. This has significantly increased the real-world risks of social fragmentation, disorder, and psychological turmoil, posing a serious threat to the normal and stable operation of society.

"Public opinion is the skin of society." When the public forms sharp and rational opinions about public affairs, society gains a healthy skin that can sense public sentiment. Public opinion is a crucial foundation for the sustained and stable operation of modern democratic societies, yet its powerful social influence attracts attention from various parties. The emergence of advanced artificial intelligence has facilitated the influence or even control of public opinion, casting shadows over the necessary transparency and fairness of social discourse.

In the political realm, artificial intelligence has long been used to influence the value

judgments and political stances of target individuals or to undermine the public opinion environment and social image of adversarial forces. In 2016, Cambridge Analytica unlawfully collected personal information from tens of millions of Facebook users for voter analysis, delivering political ads for Donald Trump's presidential campaign, marking a significant event of technological intervention in political elections. As AI technology evolves, various "manipulation tools" are increasingly accessible, with greatly enhanced deception and subtlety. In the so-called "global election year" of 2024, concerns about using AI to interfere with voters, manipulate elections, and disrupt stability are escalating. In the social sphere, malicious actors have exploited AI tools to release large amounts of emotional content, exacerbating social conflicts around sensitive topics such as race, immigration, and wealth disparity. In the commercial realm, AI is also widely used for "data, rating and sales manipulation" to distort and obscure real evaluations, promote products, or discredit competitors, severely damaging the market order.

3. Intelligent Weapons Intensifies Information Warfare

In a context of frequent social conflicts and tense geopolitical situations, artificial intelligence is widely used in "intelligence warfare," "public opinion warfare," and "cognitive warfare," worsening tensions in international public opinion and significantly increasing the risks of escalation and conflict.

Artificial intelligence provides great convenience for conducting network intrusions, intelligence gathering, and public opinion attacks. Through differentiated data delivery, AI can instantaneously create waves of public opinion that influence group cognition. By tracking data and employing algorithmic strategies, AI can predict the cognitive dynamics of different regions and groups, assisting in planning and promoting core narratives and topics.

On social media, the fabrication of false information, incitement of group antagonism, and ideological infiltration through AI has become commonplace. In 2022, a fake video purportedly showing Ukrainian President Zelensky calling for his troops to surrender and Russian President Putin declaring the end of the war circulated widely. Since the outbreak of the recent Israel-Palestine conflict, social media has also seen a surge of false content, including manipulating realistic video game footage to depict Hamas attacks and faking images of internationally renowned figures waving Palestinian flags. Amidst the fog of war information disseminated by AI, truth and falsehood have become blurred, and suspicion and division grown, fundamentally altering the nature, means, and methods of modern warfare.

III. Rapid Development Exacerbating Governance Concerns

As new types of artificial intelligence rapidly emerge, discussions about the potential of these technologies to disrupt human values are intensifying, sparking concerns of

varying degrees. Disputes over values and governance challenges raised by AI are beginning to surface.

1. The Debate over Development Paths

AI, characterized by its programmatic capacity for self-learning and self-control, presents a "black box" challenge, as even its developers often struggle to predict how it processes data after self-optimization. This uncertainty, far exceeding what is known, has fueled a widespread debate over AI's development trajectory.

Should AI development be "accelerated" or "aligned"? As researchers explore the future of AI, two camps have emerged. Proponents of acceleration argue that societal progress depends on technological innovation. Thus, pushing AI forward should be an ongoing pursuit for mankind. The alignment camp, however, advocates prioritizing the ethical impacts and social consequences of AI to ensure that technology advances in line with human values. In March 2023, thousands of entrepreneurs, scholars and executives in the field of AI—including Yoshua Bengio and Tesla CEO Elon Musk—signed an open letter titled "Pause Giant AI Experiments," voicing concerns about super-intelligent AI and calling for joint development and implementation of a safety protocol shared by mankind as a whole. Yet, even as this discussion grows, major tech companies worldwide are ramping up research and development, launching a continuous stream of new products and applications.

For the foreseeable future, AI's progress will likely be influenced by this ideological tug-of-war. As AI becomes a key strategic resource, stakeholders may encounter even deeper divisions. Ethical issues surroundingAI could become politicized, with tech giants engagedin a technology race and nations competing in an arms race, complicating future global legislative and governance efforts.

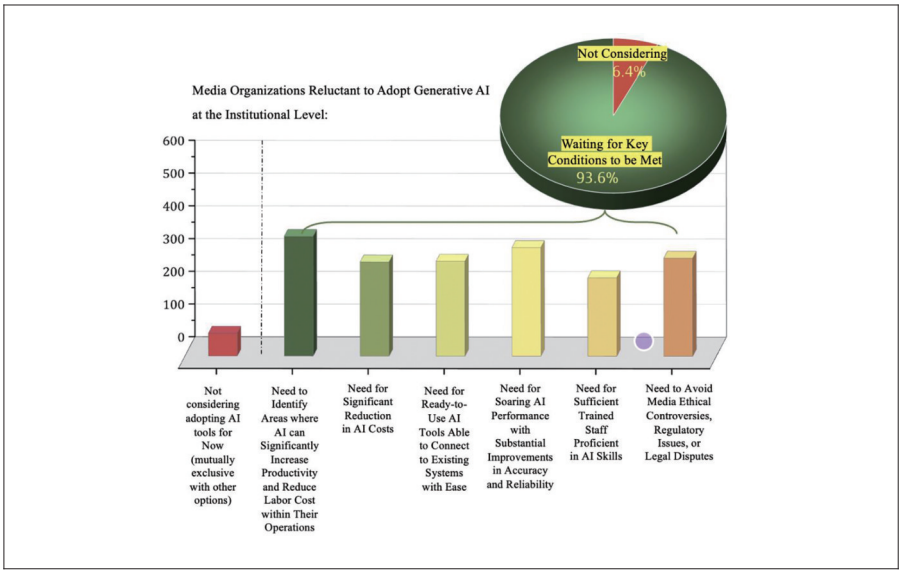
The survey conducted by this research team reveals that most media organizations currently on the fence do not reject or underestimate generative artificial intelligence; rather, they plan to adopt it once the key conditions are met. Their top three priorities are:

Clearly identifying areas where AI can significantly enhance productivity and reduce labor costs;

Achieving significant improvements in AI performance, particularly in accuracy and reliability;

Ensuring absence of ethical controversies, regulatory challenges, and legal disputes related to journalism.

Only 6.4% of respondents stated that they would never consider using generative AI tools under any circumstances.



2. The Dilemma of Value Alignment

As concerns about threats posed by AI intensify, value alignment has become one of the most fundamental and challenging aspects in AI governance, facing multiple obstacles in practice.

The goal of value alignment is to ensure that AI operates in accordance with ethical principles, moral norms, and values of human so that it functions in a socially benign way. However, in the context of global cultural diversity, questions like "Whose values should AI be aligned with?" and "How should AI be aligned?" remain difficult to answer. In the media sector, discrepancies in news value judgments, professional identities, and editorial practices across countries make it challenging to establish consistent standards for AI's application. Even fundamental journalistic principles like truth, fairness, and equality face risks of misinterpretation when translated into AI systems through abstracting, quantifying, and alignment. For example, when Amazon attempted to use AI to screen job applicants, the algorithm was soon found to disproportionately filter out female candidates. Similar biasessuch as gender and racial discrimination are equally challenging to remove from AI applications in newsrooms.

As artificial intelligence becomes increasingly integrated into news production, its operational standards and logic will significantly impact how editors and journalists define what constitutes news, good news, and valuable news, leading to a necessary re-evaluation and evolution of the news value system. If news production becomes overly reliant on technical rules to regulate journalists' behavior, traffic data to assess news quality, and algorithms to determine news value, it risks shifting from a value-driven approach to a purely utilitarian one. This could lead to a divergence between news value and public interest, distancing media outlets from societal priorities and undermining their posi-

tive role in serving the public good.

3. Regulatory Gaps

The rapid development of AI and other new technologies has given rise to new industries and forms of business, but there remain significant gaps and delays in regulatory frameworks[①]. Issues like privacy and copyright require a greater sense of urgency for consensus and prompt development of regulatory frameworks.

A fundamental conflict exists between privacy protection and AI development as AI relies on extensive human behavioral data and knowledge to improve, develop and be applied to different scenarios, such high dependence on data making privacy "nowhere to hide". In 2023, Italy temporarily banned ChatGPT due to privacy concerns and restricted OpenAI from processing data from Italian users. Similarly, the UK, Ireland, and other countries launched investigations into potential privacy violations linked to large AI models. In the media sector, user data help news outlets provide more convenient, accurate, and efficient services, but also increase the possibility of privacy breaches. As guardians of public interest, media organizations are held to higher ethical standards in defining privacy boundaries and balancing data use with privacy protection, a challenge highlighted by the use of AI.

With the decentralization of rights related to information production, processing, publication, and redistribution, copyright disputes arising from the use of AI are gaining prominence. High-quality, professional news content serves as a crucial training dataset for AI. However, the content generated by these systems often closely resembles the raw data, potentially violating the copyrights of some media organizations. In December 2023, The New York Times filed a lawsuit against OpenAI and its investor Microsoft, accusing them of using millions of its articles without permission to train AI, the first case where an AI company has been sued for its copyright infringement by a major media organization, epitomizing the copyright issues faced by the media in the AI era. Furthermore, issues around the copyright ownership and profit-sharing of AI-assisted news products remain unresolved. As a result, it has become a priority for lawmakers worldwide to protect the legal rights of all parties and establish a fair and transparent copyright system.

IV. Intelligent Applications Widens the Development Gap

Like other transformative technological breakthroughs, the widespread application of next-generation AI will inevitably lead to shifts in social wealth and power, triggering a range of socio-political and economic issues and ensuing discussions around income inequality, urban-rural divide, and disparity between the Global North and Global

①Xi Jinping's speech at the central conference on work related to law-based governance (November 16, 2020)

South. At the heart of these issues lies the question of how to equitably distribute the benefits of technological advancement, ensuring that the fruits of progress are shared by all of humanity.

1. Individual Differences and Vulnerable Groups

There is no doubt that those with access to AI technology will be more competitive and advantaged in the future. However, due to disparities in cognitive ability, resource availability, and AI literacy, certain groups—such as the elderly, the poorly educated and low-income populations—will be increasingly marginalized as AI applications continue to evolve, becoming the new disadvantaged groups in the AI era.

Take the elderly as an example. Nicholas Negroponte, the author of *Being Digital*, once asserted that "each generation will become more digital than the preceding one". With global aging and rapid AI development advancing simultaneously, senior citizens, often limited by lower information skills, declining learning abilities, and physical deterioration, struggle to reap the benefits of AI advancements. They are likely to fall into one of two extremes: resistance or overdependence. On the one hand, many elderly individuals tend to resist new technologies, finding it difficult to accept and grasp. On the other hand, some are highly susceptible to digital addiction and vulnerable to misinformation, algorithmic manipulation, and echo chambers.

2. Urban–Rural Disparities and Digital Deserts

The "intelligence gap" between urban and rural areas is a widespread issue globally, not only as a technological challenge, but also as a social and economic one. This disparity exists across various dimensions, including social development, resource allocation, education levels, and infrastructure, as well as in individual income, cultural literacy, information technology skills, and notions of knowledge.

In China, urban users have largely accessed 5G and gigabit fiber networks while rural areas still lag in network speed and stability. A majority ofnew AI technology companies are located in regions like Beijing, the Yangtze River Delta, and the Pearl River Delta, with very few in the western regions. Widespread AI backwater or and even desertsalso exist in the United States. In anews report published in June 2024, *The Washington Post* noted that rural areas in the United States have long been waiting for broadband services, with most relying on slow internet transmitted via copper lines which cannot handle large data transfers; some areas don't even have access to internet. The issue of disconnection is particularly acute in rural areas inhabited by minorities and indigenous populations.

Problems such as the imbalance of educational resources in the AI ageare also gaining prominence. Children in urban areas can engage with technology first-hand, appreciating the novelty and convenience AI offers while grasping the scientific principles behind it. In contrast, for most rural children, AIremains an abstract term, with nopractical experience or understanding. This pervasive existence of "AI deserts" will contrib-

ute to further social division and fragmentation, making equitable access to technological benefits a distant goal.

3. The North–South Divide and the "AI Divide"

In his speech on strengthening international cooperation in the capacity building of AI at the UN General Assembly, China's Permanent Representative to the United Nations Fu Cong highlighted that the rapid advancement of global AI technology profoundly impacts economic and social development across countries and human civilization. However, most people in developing countries have yet to engage with or benefit from AI, and the global digital divide continues to widen. As the global economy shifts toward AI-driven growth, underdeveloped nations risk falling further behind, deepening the economic and social divide between them and developed countries. The uneven adoption of AI technology has become a pressing concern, outpacing the overall rate of economic development.

Currently, the economic and social benefits of AI are geographically concentrated in the Global North. The fourth edition of the *Global AI Index* 2023, published by UK media company Tortoise, ranks the U.S. first, followed by China and Singapore in terms of AI investment, innovation, and implementation. Among the top 20 countries, eleven are from Europe. While advanced AI technologies are widespread in leading countries, many in Africa and Latin America still rely on 2G networks for phone calls and texting, some completely offline. As society increasingly adopts intelligent production, disparities in productivity, economic growth, education, digital literacy, and research between the Global North and South are expected to widen. In areas such as large language model development, talent recruitment, and the creation of AI infrastructure—communication networks, big data platforms, and computing centers—significant capital investment is required. This creates an "AI divide" that developing countries will struggle to bridge in the near term.

A report by the International Labour Organization in 2024, titled "Mind the AI Divide: Shaping a Global Perspective on the Future of Work," warns that while AI technology brings immense opportunities for innovation and development, the uneven investment and deployment among countries may exacerbate disparities in income levels and quality of life. The current emergence of an "AI divide" means that high-income countries benefit from technological development and application while middle- and low-income countries, particularly those in Africa, lag behind. The impact of AI on labor markets also varies by country and region. In developed countries, many jobs are increasingly subject to automation and AI integration, but these countries can also better leverage AI technology to enhance productivity. In contrast, developing countries, while temporarily shielded from automation risks due to insufficient digital infrastructure, may face long-term productivity bottlenecks. The report warns that without measures to strengthen international cooperation and support for developing countries, this divide will only widen, potentially negating the socio-economic benefits that AI technolo-

gy could otherwise provide.

Additionally, some developed countries are found to leverage their first-mover advantage in AI technology to seek technological hegemony, forming exclusive groups that hinder other countries' progress and deliberately creating technological barriers to disrupt global AI supply chain. This "small courtyard with high walls" phenomenon will deepen the AI development gap between the Global North and Global South, exacerbating the situation where "the strong gets stronger, and the weak gets weaker".

Part Three
Mission: Putting People First and Promoting AI for Good

Media bears important social responsibilities in seeking correct answers to the major questions of our times and building wide consensus around the world.[①]

—— Xi Jinping

It has become aglobal consensus to strengthen the regulation of AI usage. In the *Global Artificial Intelligence Governance Initiative*, Chinese President Xi Jinping proposed fundamental principles including "Putting People First" and "AI for Good", providing China's solution to the challenges of AI governance. Amid the transformative wave brought about by AI, the global media need to share opportunities and risks together. By leveraging their professional strengths, they can foster a positive information environment and ecosystem of public opinion, thereby contributing to an open, fair, and effective mechanism of global AI governance, building a community with a shared future for humanity, and creating a better world by harnessing the powerful influence of the media.

I. Accelerating AI-Driven Industry to Enhance the Value of Media

News media should fully leverage the instrumental value of AI, exploring its all-inclusive application through the process of news collection, production, distribution, reception and feedback, harnessing AI as a new quality productive force, and offering better news products and services to the public.

1. Enhancing Systemic Efficiency through Intelligentization

To address the challenges posed by a decentralized environment where anyone can act as media, news media practitioners need to focus more on empowering themselves with technology, transforming from traditional "information processors" to "intelligent information producers". By building systems for production and dissemination, data technology, organization and management, and reception feedback driven and supported by AI, practitioners can significantly improve their media penetration, influence,

①*Xi's Congratulatory Letter to the Fourth World Media Summit (November 22, 2021)*

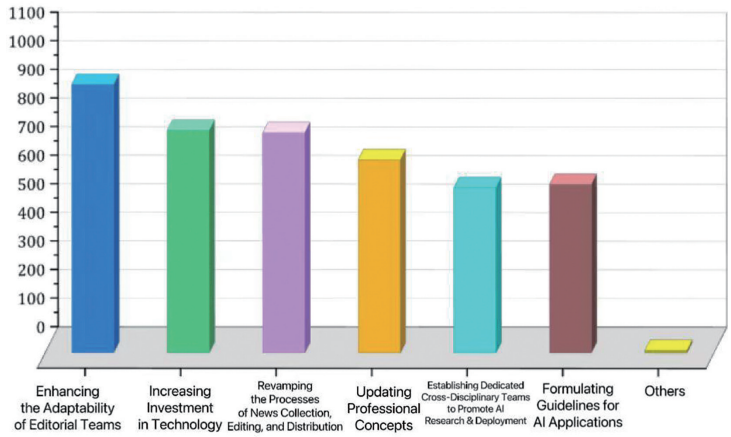
and credibility. Relying on AI technology, they can enhance the speed, depth, breadth, and accuracy of news dissemination, thereby strengthening their role in connecting society and building consensus.

The survey conducted by the research group shows that, most media organizations have recognized that generative AI is infiltrating the media industry with unstoppable momentum. Whether they choose to actively engage or wait and see, media are facing pressures of self-transformation to adapt to the changing landscape of the industry.

Regarding how to transform themselves to cope with these changes, the interviewed media organizations mainly identified the following three approaches:

1. Enhancing the adaptability of editorial teams;
2. Increasing investment in technology;
3. Revamping the processes of news collection, editing, and distribution.

The Self-Transforming Paths Recognized by the Media Organizations Interviewed:



2. Ensuring Safety and Reliability Through Standardization

In response to the features of changes in business forms in the era of AI, the media should continue to upgrade standards for news production and dissemination. AI technology should be fully utilized to empower the whole processes—collection, production, distribution, and dissemination— while minimizing associated risks. A risk assessment and prevention framework for AI in the media sector should be established. News media should further improve mechanisms for verifying the authenticity of news content, particularly regarding deepfake content, automatically generated writing, and algorithm-driven content, and should use AI technology to verify leads and materials, ensuring the trustworthiness and reliability of information. The investment in fact-checking technologies and the training of specialized professionals should be increased.Public participation in fact-checking efforts should be encouraged.

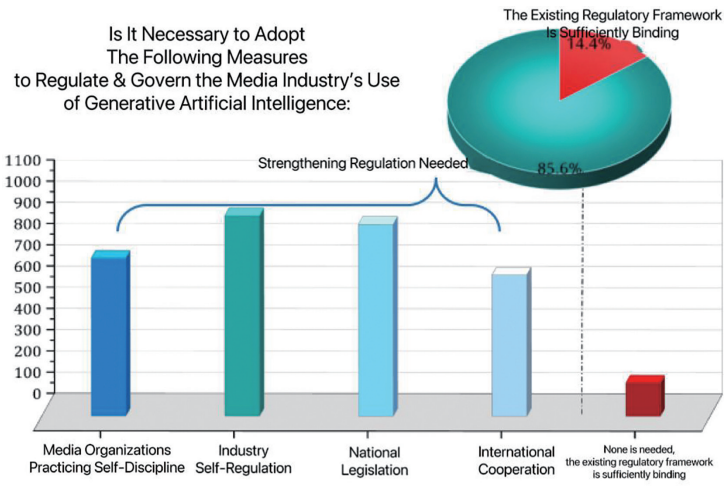
3. Enhancing News Quality Through Professionalization

The depth and professionalism of reporting have become more valuable amid "information overload" and "information cocoon". These qualities are significant reflections of media's social responsibilities and credibility. News organizations should, on the one hand, strengthen the expertise of their editorial teams in niche areas while, on the other hand, fully leverage AI technology to mine, filter, verify, correlate, and analyze information, thereby enabling more in-depth and high-quality reporting to cater to the demands of the audience and contribute to social progress.

Ⅱ. Establishing Ethical Standards based on Good Use

In the AI age, the media not only disseminate news and information, but also shape and safeguard social values. While enhancing the application of technology, global media must uphold journalistic ethics and fulfill social responsibilities. Mainstream values of humanity should guide "machine algorithm", embedding journalistic ethics all-inclusivelyin theuse of AI in the media. A people-oriented ethical framework must be established.

The survey shows that, regarding the potential negative impacts of generative artificial intelligence in the media industry, only 14.4% of respondents believed that "the existing regulatory framework is sufficiently binding". Meanwhile, 85.6% of respondents supportedcertain forms of strengthened regulation and governance.



1. Dispelling the Information Fog with News Authenticity

News authenticity is the cornerstone of a media outlet's credibility and influence.

Any technological innovation that departs from the truth in news is putting the cart before the horse. The media must use the truthfulness of news as the ultimate standard for applying AI technologies, constructing a reliable cognitive space for the public through authentic reporting. By combining the expertise of journalism with the technological edge of AI, the media can provide audiences with authentic, impartial, comprehensive, and timely information, eliminating misinformation, information pollution, information silos, and misleading information. Media must lead by avoiding "cognitive warfare," refraining from producing false information, and steering clear of manipulating public opinion to interfere in other nations' internal affairs. They should strive to be the "night watchmen" and "breakwaters" against the spread of misinformation.

2. Guiding Instrumental Rationality with Journalistic Ethics

As direct users of AI, media practitioners bear ethical responsibilities that directly impact the social effects of technology use. Media organizations should enhance the ethical education of their employees in the use of AI through continuous training and learning, improving their ethical awareness and technical proficiency to ensure the regulated and reasonable use of AI in practice.In using AI technology for data collection, algorithm design, and R&D of technologies and products, media practitioners should pay special attention to potential distortions and biases in the products, ensure the diversity, fairness, and inclusiveness of information, and proactively identify and eliminatewhat may contradict the principles of fairness and non-discrimination, to reduce public misunderstandings, divisions, and hostility. Media should uphold shared human values as gatekeepers of news and leaders of social values. They must actively counteract extreme and harmful information online, working together to prevent the spread of extremism and terrorist content. Media must uphold journalistic ethics and enhance social responsibilities.They need to foster a cognitive environment and ecosystem of public opinion that is rooted in truth, rational communication, inclusiveness, and a healthy, positive atmosphere. This will promote the effective dissemination of knowledge and the equitable sharing of technological dividends, injecting positive energy for human welfare and social progress.

3. Protecting Data Privacy through Regulatory Mechanisms

Media should pay more attention to the potential risks posed by AI, including those against technological safety, cybersecurity, and socioeconomic development. They should monitor and address concerns about AI models' "black box" of non-transparent algorithms, including risks of personal privacy breaches, national security leaks, deepfake threats, copyright disputes. Media practitioners need to understand the importance of data security and user protection, particularly for minors, and to establish robust mechanisms to ensure that user information is fully protected in the processes of collection, storage, handling, and transmission. Following the principle of "data minimization", media organizations should try their best to limit the collection and storage of

personal data. When analyzing data with AI technologies, they should strictly control data access. In designing and using AI algorithms, they should adhere to a mechanism of moderate transparency to ensure users' right to be informed and foster self-regulatory mechanisms within the industry to elevate its operation standards and norms. Additionally, they should prevent data breaches and cyberattacks through encryption and security protocols. Through risk monitoring and fact-checking, they can safeguard the cognitive spaces and promote trust and communication among countries.

Ⅲ. Strengthening Dialogue and Cooperation to Improve Global Governance

The media worldwide should build consensus through dialogue and cooperation, creating an open, effective, and fair global mechanism for AI governance that ensures benefits forthe human race.

1. Bridging the Intelligence Divide for Fairness and Inclusivity

The media should work together to bridge the digital and intelligence divides between different social groups and regions. By leveraging AI for multi-lingual and diversified content, they can ensure the outreach of knowledge to all segments of society, raising overall cognitive levels. There should be a focus on addressing the North-South divide in the use of AI, promoting collaboration in areas including technology development, content production, data analysis, rule-setting, and talent cultivation. Sharing experiences and resources will foster joint progress, opposing the "small yard, high fence" mentality and technological hegemony in AI use. The media in Global South countries should actively participate in the formulation of AI-related rules and standards within the global media landscape, enhancing their representation and voice in international policy-making. Through concrete actions, they can advocate equal rights, opportunities, and rules in the development and governance of AI for all countries.

2. Enhancing Collaboration to Promote Practical Cooperation

Media organizations should work together with professionals to strengthen information exchange and technological cooperation, sharing the latest development and knowledge outcomes. Open-source technology should be encouraged and the exploration of standards for the use of AI in the media prioritized. In high-consensus areas such as natural language processing, image recognition, and user behavior analysis, AI tools and systems could be developed to avoid redundant research and resource waste. Key issues such as the "black box effect" and "information cocoons" can be addressed collaboratively through risk assessment and experience-sharing. Resources need to be pooled toestablishlong-term joint verification projects or mechanisms to improve the use of AI in detecting and combating misinformation. A multilateral media dialogue mechanism should be explored, building a long-term platform for communication to lay the

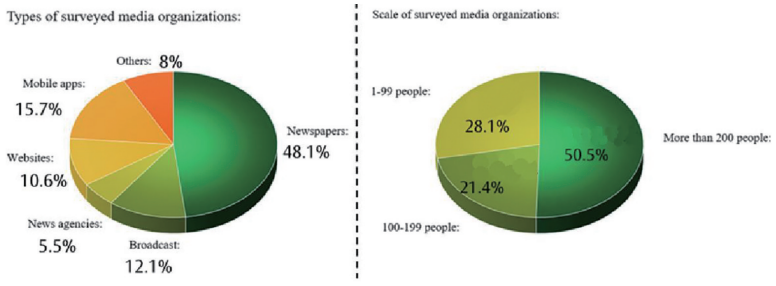
groundwork for joint communication and cooperative research.

3. Aligning Values for Better Global Governance

Media worldwide not only serve as conduits for information, but also play a key role in cultural transmission and exchange between civilizations. Peace, development, fairness, justice, democracy, and freedom—shared values of mankind—form the foundation for consensus among different civilizations globally. These values are a critical intellectual sourcefor promoting global governance and the "golden key" to overcoming challenges in the value alignment of AI. The media around the world should engage in multi-level and multi-form discussions on global AI governance, encouraging rational dialogue and advocating shared values. This will drive public attention, understanding, and participation in the governance, creating a conducive social environment for international consensus. Based on the principles of broad participation, consensus-building, and gradual progress, dialogue and exchanges should be deepened while respecting the differences in national policies, regulations, and practices. By promoting the integration of national laws and industry standards and adhering to a people-centered approach, media organizations should champion AI for good and strive to establish ethical guidelines and global governance frameworks based on shared values, steering the development of AI in a direction that supports the construction of a global community of shared future.The media around the world should harness the dual empowerment of "culture+technology" to enhance the discourse power and influence of different civilizations in international communication. They should create a platform for "digital diplomacy" in the international community, deepening intercultural exchange, eliminating misunderstandings, and fostering mutual understanding, thereby promoting the construction of a global community of shared future in the AI era.

Part Four
A Survey on the Perception and Use of Artificial Intelligence in Global News Media

In 2024, New China Research, a national high-end think tank under Xinhua News Agency, launched a global survey targeting news media organizations regarding their perception and use of AI. The research team conducted the survey in three languages—Chinese, English, and French—covering media organizations from 53 countries and regions, including newspapers, broadcasting stations, news agencies, websites, and mobile service providers. A total of 1,207 questionnaires were collected, with 1,094 valid responses.



Given that generative AI, represented by ChatGPT, has had a significant impact on media organizations whose main business is the production of texts, images, and video content, the survey was designed to provide insights into the new shifts and dynamics AI is bringing to this industry. An analysis of the valid responses revealed the following:

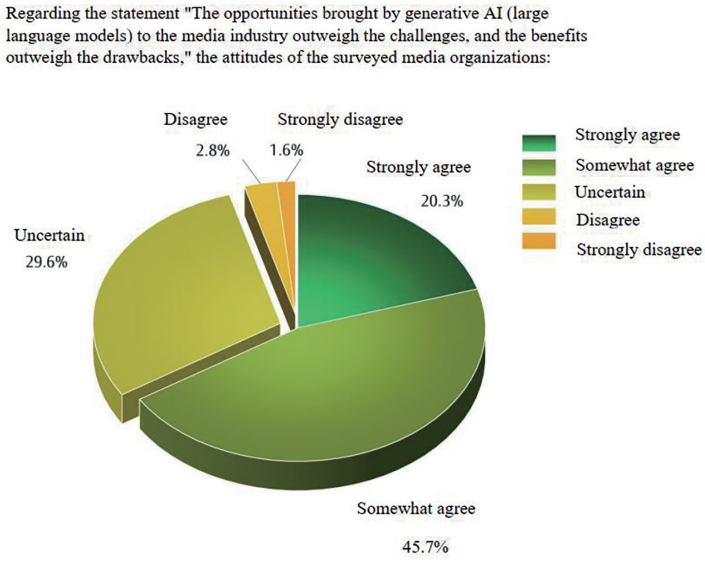
I. A majority of media organizations (66%) have a positive attitude toward generative AI

As with any new phenomenon, generative AI has triggered both controversies and doubts. It is praised as a type of new quality productive force, but also frequently questioned for issues such as hallucinations, bias, stereotypes, and "political correctness". The survey results indicate that media organizations generally have a positive outlook regarding AI's impact on the industry.

The data show that 20.3% and 45.7% of respondents highly agree or somewhat agree with the statement that "The opportunities brought by generative AI outweigh the challenges, and its benefits outweigh the drawbacks". Only 2.8% and 1.6% disagree or strongly disagree with this view while 29.6% believe the pros and cons are still uncertain.

This suggests that, generally speaking, global media organizations are highly attentive to technological changes affecting the entire industry and are optimistic about AI be-

coming a "game-changer" in media.



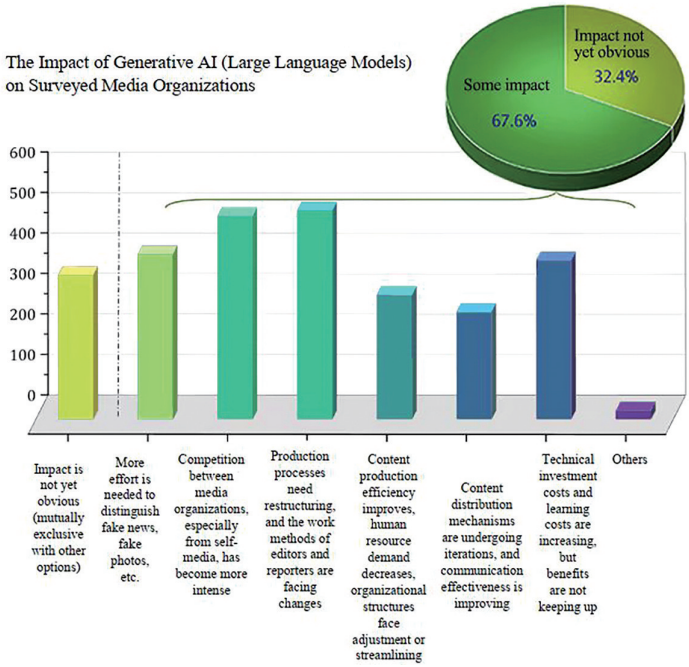
II. A majority of media organizations (67.6%) have already experienced changes brought by generative AI

Generative AI has already triggered a shift in the media industry. However, different media organizations have varying levels of awareness of these changes. 32.4% of media respondents state that the impact of generative AI is "not yet obvious". Meanwhile, 67.6% have already noticed significant changes. The three changes mentionedmost frequently are:

1. Production processes require restructuring, and the working methods of editors and reporters are transforming;

2. Competition among media outlets, especially from social media platforms, is intensifying;

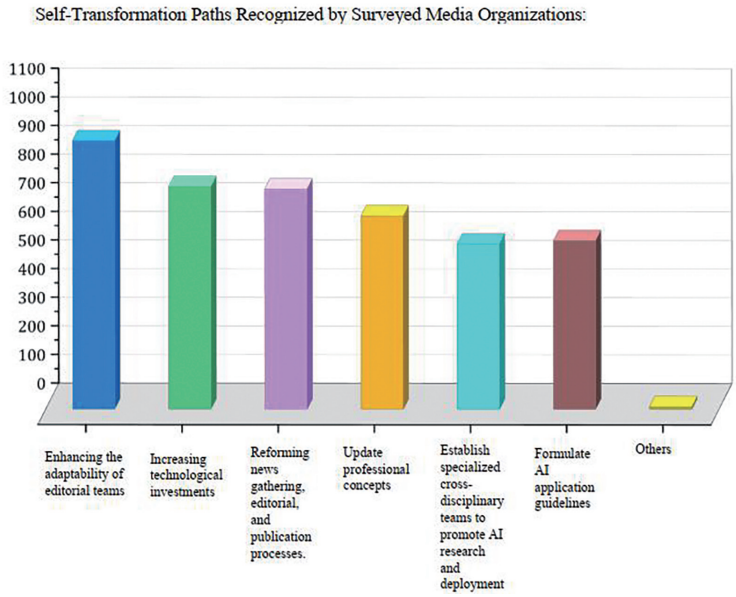
3. More effort is needed to identify fake news, fake photos, and other forms of disinformation.



This shows that most media organizations recognize that generative AI is penetrating the industry with unstoppable momentum and they will face the pressure to adapt whether they choose to dive in or stand back and wait.

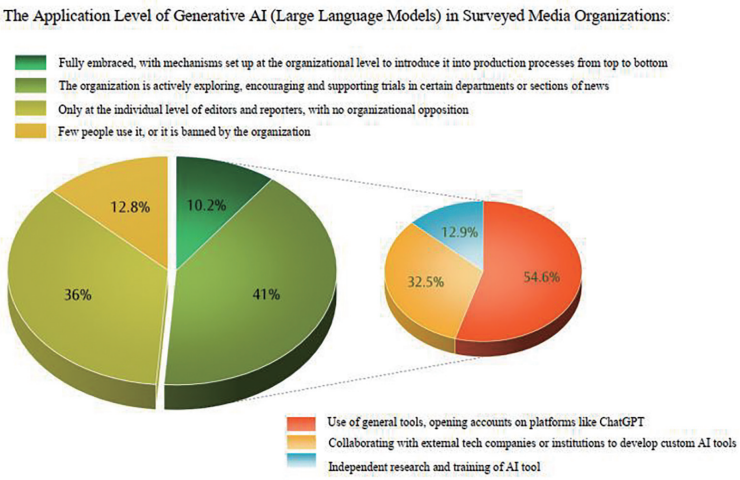
To cope with the changes, the top three recommended strategies by respondents are:

1. Enhancing the adaptability of editorial teams;
2. Increasing technological investments;
3.Reforming news gathering, editorial, and publication processes.



III. More than half of the media organizations (51.2%) have begun using generative AI

2024 is the year organizations began large-scale application of generative AI. As leaders in content production, many media organizations are striving to be "early birds". Globally, 10.2% of media organizations have fully embraced AI, establishing institutional mechanisms to integrate AI into their workflows from the top down. Meanwhile, 41.0% of organizations are actively exploring AI applications, encouraging and supporting certain sections to experiment with AI. Another 36% of respondents have not adopted AI through a top-down approach, but individual staff members are experimenting with AI at a personal level with the tacit approval of their organizations. Only 12.8% of media organizations report minimal use of AI, some banning its use entirely.



Among the organizations actively promoting AI at an institutional level, the most common approach (54.6%) is using publicly available tools like ChatGPT. Additionally, 32.5% are collaborating with third parties to develop and customize AI tools, while 12.9% are developing their own AI systems. This suggests that there is still considerable growth potential for privately deployed large language models in vertical applications within the media industry.

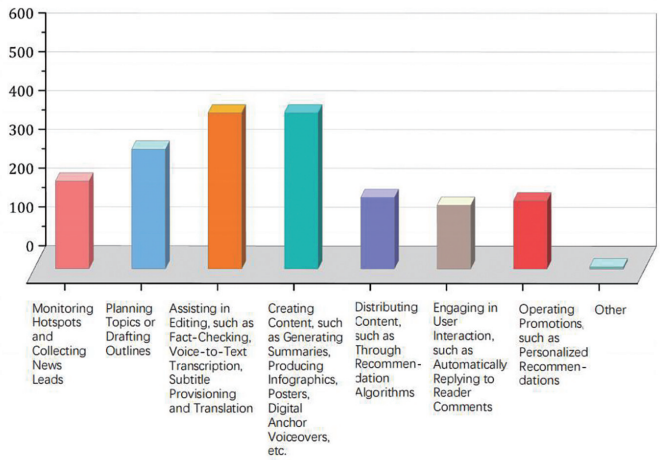
The top three AI application scenarios being explored by media organizations are:

1. Assisting with editing tasks, such as fact-checking, speech-to-text conversion, adding subtitles, and translation;

2. Content creation, such as generating summaries, creating graphic posters, and providing voiceovers for digital anchors;

3. Planning topics or drafting outlines.

Applications Explored or to be Explored by Surveyed Media Organizations for Generative AI (Large Language Models) at the Institutional Level:



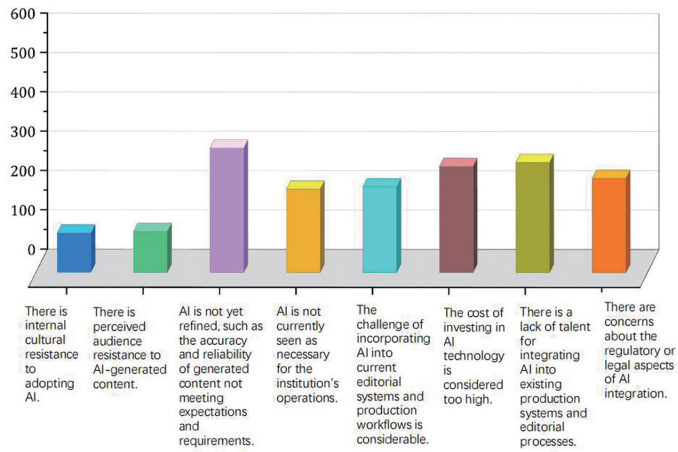
For media organizations that are currently hesitant, the top three barriers to fully embracing generative AI are:

1. AI's not yet where it needs to be, with content accuracy and reliability falling short of what's required;

2. Challenges in human-machine collaboration, compounded by a scarcity of talent skilled in integrating AI;

3. The steep cost of investing in the technology.

Main Reasons for Hesitancy in Adopting Generative AI at the Institutional Level:



That said, the majority of media organizations taking a wait-and-see approach are

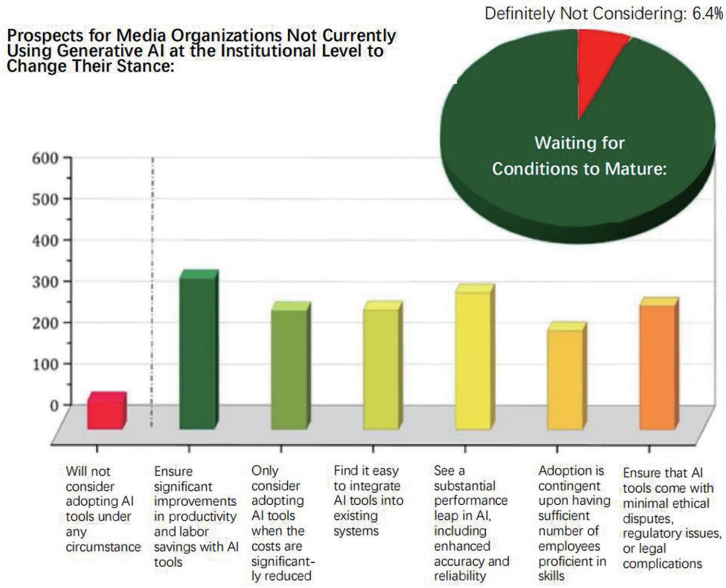
not dismissing generative AI. They're strategizing to adopt it at the right time, with these top three considerations:

1. Pinpointing areas in their business where AI could markedly boost productivity and cut down on manpower;

2. Seeing a quantum leap in AI capabilities, especially in terms of accuracy and reliability;

3. Making sure that the integration won't bring out ethical disputes, regulatory hurdles, or legal issues.

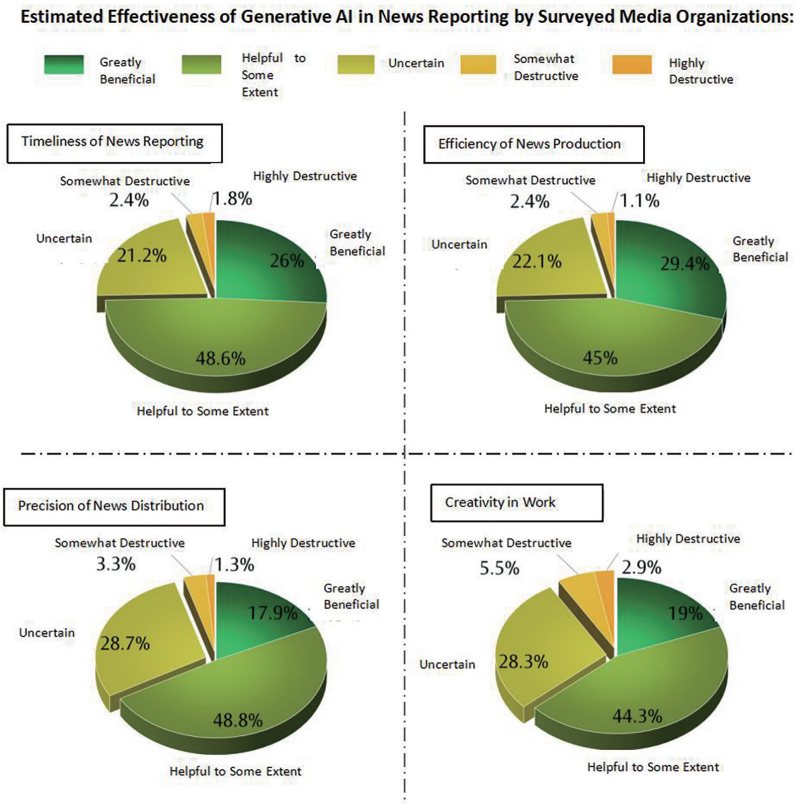
A mere 6.4% of the media organizations surveyed are currently not considering the adoption of generative AI tools at all.



IV. News Media's Anticipation of Generative AI Centers on Speed and Efficiency

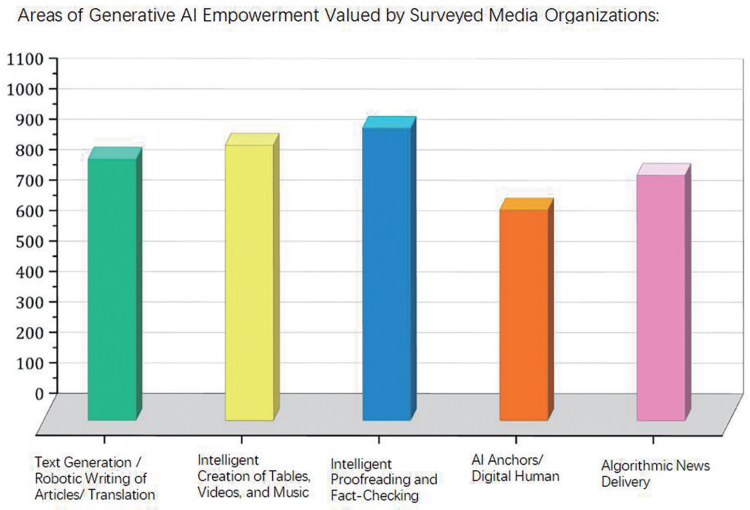
The media outlets surveyed, whether they have adopted generative AI at the institutional level or not, generally harbor a positive outlook on the potential of this novel technology to contribute to the industry. They anticipate that generative AI will be a driving force in enhancing both the "speed" and "efficiency" of news reporting, bringing it to new heights.

74.6% of the media organizations surveyed anticipate that generative AI will contribute to the timeliness of news reporting. Similarly, 74.4% believe it will boost the efficiency of news production. Additionally, 66.7% expect improvements in the precision of news distribution while 63.3% look forward to enhancements in the creativity of content presentation.



The top three areas where media organizations value the empowerment of generative artificial intelligence are:

1. Intelligent proofreading and fact-checking;
2. Intelligent creation of charts, videos, and music;
3. Text generation/robotic writing/translation.



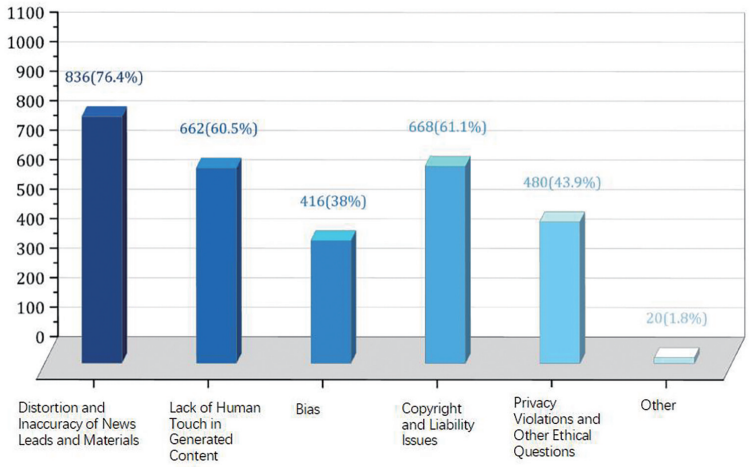
V. Media's Wariness of Generative AI Centers on Trustworthiness

The majority of media agencies approach the deployment of generative AI with a healthy dose of skepticism. When asked about the issues they have encountered or anticipate with generative AI, a staggering 76.4% of respondents voice concerns over the potential for "distortion and misalignment of news leads and materials", which far exceeds the 61.1% who point to "copyright and liability issues" as the second most pressing concern.

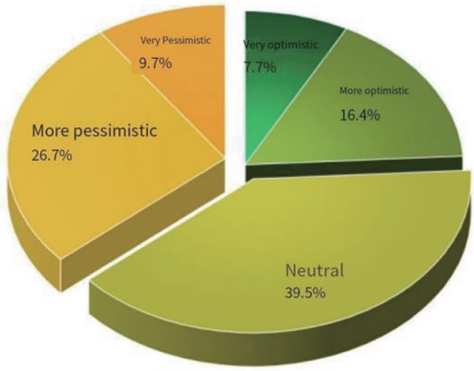
Moreover, when considering the impact of generative AI integration into the media industry over the next 3 to 5 years on the trustworthiness of the information environment, 36.4% of those surveyed are pessimistic, a notable 12.3 percentage points above the 24.1% who are optimistic. A significant portion, 39.5%, remain neutral in their expectations.

Trustworthiness and authenticity are the cornerstones of journalism. It is thus inferred that, in the immediate term, most media organizations will likely restrict generative AI to a minor supportive role in content production.

Problems Encountered or Expected by Surveyed Media Organizations When Utilizing Generative AI:



Surveyed Media Organizations' Predictions for the Credibility and Reliability of the Information Environment in the Next 3 to 5 Years with the Integration of Generative AI:

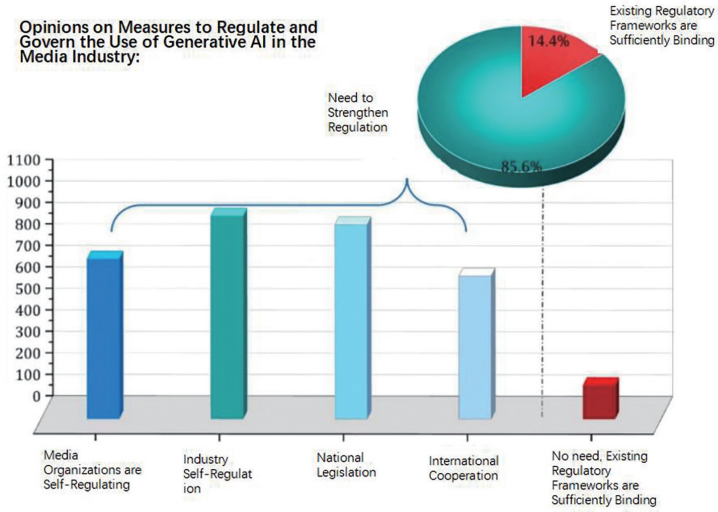


VI. A Majority of Media Organizations (85.6%) Call for Enhanced Oversight of Generative AI

Regarding the potential adverse effects of generative AI within the media sector, a mere 14.4% of respondents feel that "current regulatory frameworks are sufficiently binding". An overwhelming 85.6% are in favor of bolstering regulation and governance measures, with a strong inclination towards "industry self-discipline", "enactment of national laws", and "internal media organization regulation".

This indicates that media organizations are not only wary of the inherent technical

issues with generative AI, but also vigilant about the risks associated with its unintentional misuse or deliberate abuse, which can lead to the proliferation of false information. Such risks cannot be curbed merely by dealing with one's own problems in isolation.



It should be noted that the survey was conducted using a mix of online questionnaires and in-person interviews. Participants were invited representatives from various organizations, primarily consisting of Xinhua News Agency's global media clients. The respondents were all institutional media outlets, with each permitted to submit only one response. The collected valid responses demonstrated a wide range of representation across different types, sizes, nationalities, and audience demographics, providing a comprehensive reflection of the global media industry's understanding and approach to generative AI.

Generative AI was used to assist in certain stages of data analysis and interpretation for this report. All AI-generated content included in this report has been manually checked and verified to ensure accuracy.

Conclusion

Everything about humanity is being reshaped by AI. After years of evolution, AI, entering an explosive period, has become an important driving force for the technological revolution, industrial transformation, and even social change. In the past two years, generative AI technology represented by ChatGPT, Sora, etc. has triggered a new wave of global AI technology and industry.

The future is here, but what we don't know outweighs what we do know. AI is challenging people's cognitive and ethical boundaries while humans are caught off guard by the "new species" they have created. People don't even know whether they have created AI as a "tool" or whether they are just "acting as an unconscious tool of history" in the evolution of AI.

Humans are amazed, delighted, anxious and worried, in a state of "culture shock" brought about by AI.

Fortunately, the rationality of human beings is also awakening at the same time as they are starting to explore and contemplate new forms of human-machine integration. Faced with a series of novel challenges in areas of regulation, law, security, ethics and employment stemming from the development of AI, international organizations and numerous countries have embarked on exploring viable pathways for AI governance and have achieved some consensus, endeavoring to seek a balance between progress and security. By now, hundreds of laws and regulations, administrative instructions, and ethical norms on AI governance have been issued by countries and regions.

The information environment in the AI era is undergoing crucial changes, with the boundaries between virtuality and reality disappearing and the online and offline highly integrated. In this media ecosystem, the "pseudo-environment" created by information dissemination has become more decisive in building human cognition, influencing subject decision-making and guiding the direction of civilization. The evolution of AI from "tool" to "subject" undoubtedly complicates further the information environment.

In this context, the traditional social role of news media in shaping the information and cognitive environments is being reconstructed. From the height of human civilization, global news media should jointly consider their new roles, missions and responsibilities in the AI era, to better defend the common values of humankind and inject more positive energy into building a community with a shared future for humanity.

Notes and Acknowledgments

The expert group of this think tank report on "The Responsibility and Mission of News Media in the Era of Artificial Intelligence" is led by Fu Hua, President of Xinhua News Agency and Chairman of the AcademicCommittee of Xinhua Institute, with Ren Weidong, Deputy Editor-in-Chief of Xinhua News Agency, as the deputy head. Members of the group include Liu Gang, Wen Jian, Liu Hua, Chen Yi, Li Feihu, He Huiyuan, Li Cheng, Chen Yi'na, He Xiaofan, Li Tao, Shen Li, Zhao Yixuan, Dou Shuqi, Zhou Yu, Li Lijun, Liu Rongrong, Guo Xinfeng, Li Xuedi, Zhu Junqing, Huang Xinchuan, Wang Zhonghao, Chen Guoquan, and Liang Qiawen.

After the launch of the project, the group visited many media outlets, technology companies, and research institutes and it distributed questionnaires to global media organizations in Chinese, English and French before completing the writing, revision, proofreading and translation.

Professor Hu Zhengrong of the Chinese Academy of Social Sciences, Professor Shen Yang of Tsinghua University, Professor Guo Quanzhong of the Minzu University of China, and experts from the Chinese Academy of Cyberspace, the China Center for Information Industry Development (CCID), Tencent, Baidu, and Alibaba, etc. have provided assistance and guidance in the preparation of this report. The questionnaires have been received by more than 1,000 media organizations, including newspapers and periodicals, broadcasting and television stations, news agencies, and websites, in 53 countries and regions. We would like to registerour sincere thanks for the support we have received throughout this project.

Errors or omissions might exist in this report given the limited scope of materials available and the authors' limited expertise. We welcome any constructive criticism and suggestions for improvement.