



Artificial intelligence (AI) in journalism: Boon or bane?

Generated with AI
(Bing Image Creator)

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AI is...

“a collection of ideas, technologies, and techniques that relate to a computer system’s capacity to perform tasks normally requiring human intelligence”

-- (Journalism AI)

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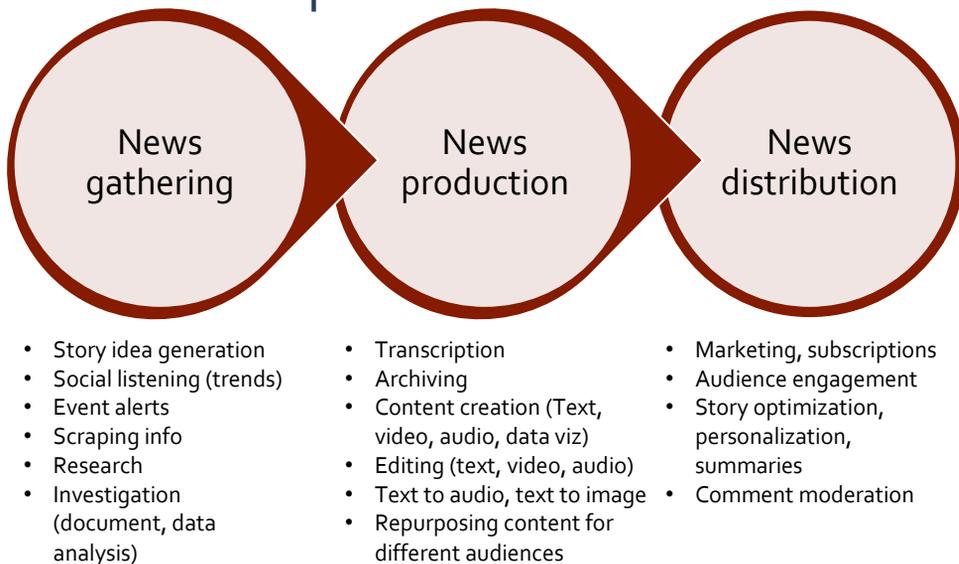
AI in journalism isn't new

- Associated Press in 2014 automated the production of quarterly corporate earnings stories from financial data feeds **without human intervention** (Automated Insights)
- Terms: Robot Journalism, Automated Journalism, Algorithm Journalism



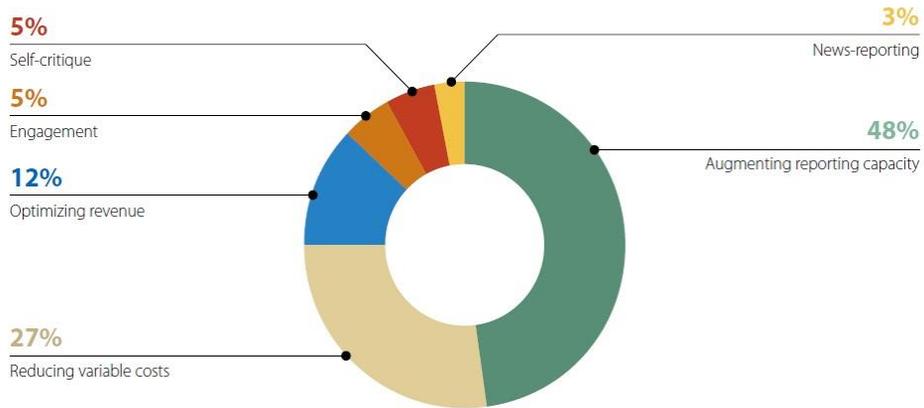
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AI in the news process



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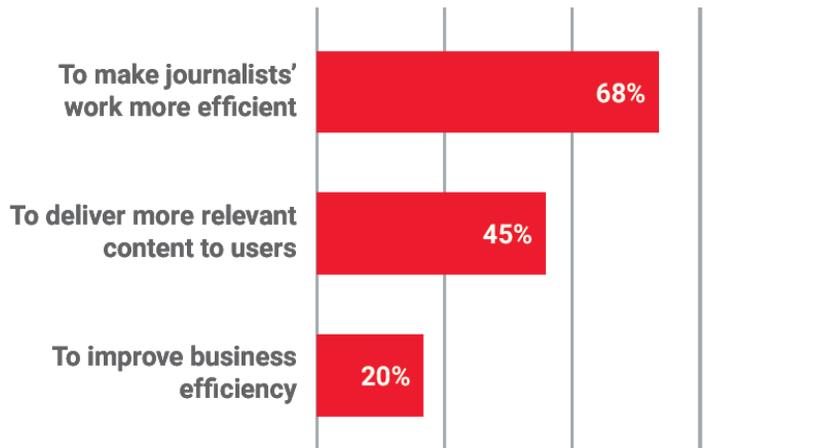
Primary Purpose of AI in Journalism (2012–2021)



Source: Composed by authors, based on *The Presence and the Potential of AI in Journalism*, Knight Foundation 2021.

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Why newsrooms use AI (2023)



Source: Beckett, C. (2023). *New powers, new responsibilities: A global survey of journalism and artificial intelligence*

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Some AI subsets in journalism

Machine learning (ML)

- Models use algorithms to “learn” from data patterns and perform tasks without human direction or without being programmed to do so
- e.g., Transcription

Deep learning (DL)

- Large, complex datasets are fed to teach computers to process data in a way that is inspired by the human brain. It uses interconnected nodes or neurons in a layered structure that resembles the human brain
- e.g., Translation, image and speech recognition, voice assistance

Natural language processing (NLP) and natural language generation (NLG)

- Computational processing and understanding of human languages. In its early stages, NLP translated structured data into text through natural language generation, and vice versa through natural language understanding
- e.g., Google search, Google Pinpoint

Computer vision (CV)

- Computers are provided with the ability to “see” images by extracting information from digital images and videos through deep learning and machine learning
- e.g., Geolocation, reverse image search

Generative AI

- Models are trained by NLP, neural networks, and/or deep learning AI algorithms to ingest, “understand,” and generate responses based on massive input data (LLM). They can generate text, imagery, audio and synthetic data
- e.g., ChatGPT, Google Bard, Bing Chat, DALL-E

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A-CI	Co-Fl	Fu-IF	J-Ot	Ov-Ta	Th-W
Agolo	Coral	Full Fact	Jigsaw	Overtone AI	The ConversationAI Moderator App
Airship	CrowdTangle	Futuri	Lede AI	Parse.ly	Topic Pulse by Futuri Media
AJC Bot	Dataminr	Google Alerts	Looker (part of Google Cloud)	PEACH	Trint
Amazon Polly	Datasketch	Google Fact Check	Mather	Perspective API	True Anthem
Amazon Rekognition	DataWrapper	Google Lighthouse	Mecodify	RADAR (Reporters and Data and Robots)	Twipe - JAMES
aravoices	DeepL	Google News Initiative Training Center	Meltwater	Rosie	United Robots
Arria	Descript	Google Pinpoint	Narrativa	Samdesk	Varia Research
Automated Insights	Disqus	Grammarly	New/s/leak (NetWork of Searchable Leaks)	Scikit-Learn	Viafoura
Bertie	Echobox	Happyscribe	NewsWhip	SocialPilot	Vision AI
Chartbeat	ETX Studio	Hearken	NLTK	Sonix	Voitto
Chequebot	Factmata	IBC Accelerator: Live Content Moderation	OpenWeb	Syllabs	Wibbitz
Clarifai	Flourish	IFTTT	Otter	Tableau Cloud	Wochit

Paul Adepoju, ICFJ

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JOURNALIST'S TOOLBOX™ AI

Look at journalism's future, not its past.



Social media

Automated tools for social media writing, sharing analysis and much more



Audio | podcasting

Tools for transcribing interviews, text-to-audio creation and podcast-building



AI writing tools

Links to the latest AI tools for reporting, writing stories and headlines



Browser extensions

Dozens of AI-driven browser extensions, plug-ins and other tools



Search and SEO

Dozens of tools for using AI to find information and how to evaluate it



Image creation

MidJourney, DALL-E, Adobe Firefly and dozens of other tools for creating illustrations



AI editing tools

Dozens of tools for writing headlines, brevity, grammar, spelling and much more



Data tools

Scrape data, analyze it and create stunning visualizations with AI tools and plug-ins



ChatGPT tools

How to use ChatGPT, plug-ins and other tools to save time when producing journalism



Video creation

Text-to-video tools as well as AI resources to pull YouTube video summaries



AI-driven design

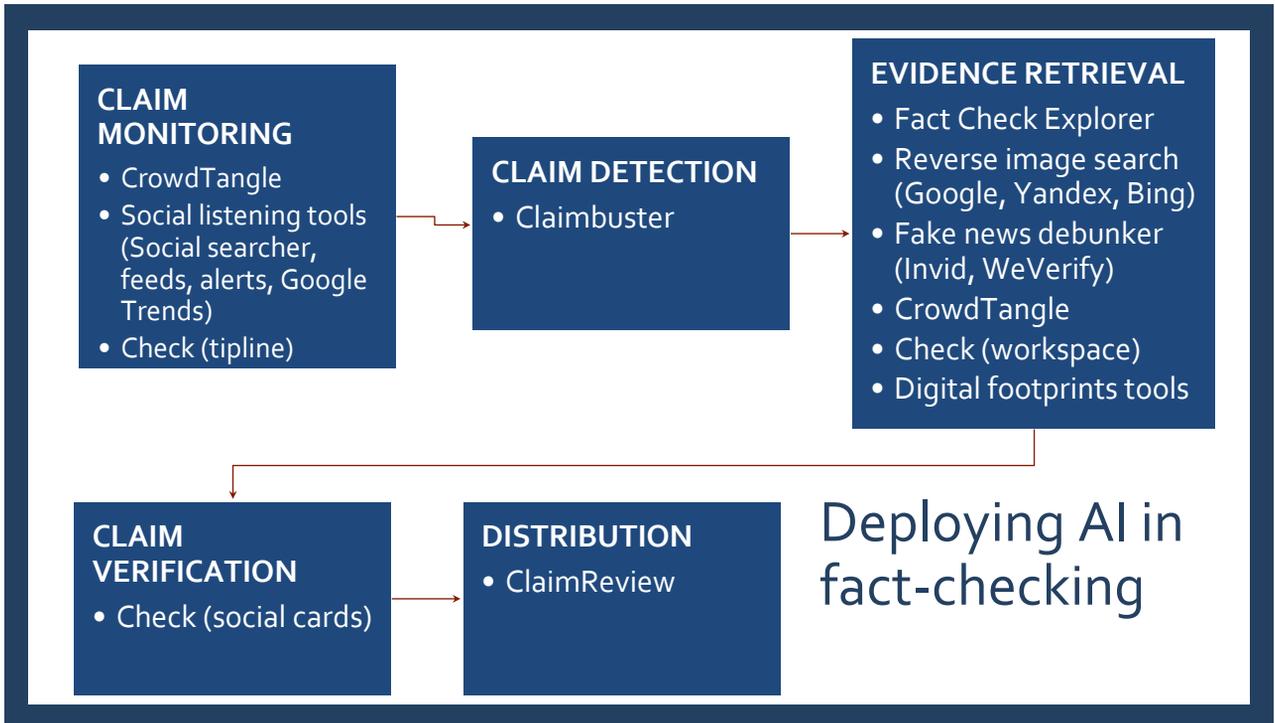
Simple text-to-design tools for social media cards, icons, web design and more

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Fact-checking process



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Automated fact-checking in PH newsrooms

- Limited understanding of AI (equated just to ChatGPT)
- Low to medium AI integration
- Adopted mostly in evidence retrieval (e.g., reverse image search, geolocation), not in claim detection and claim verification
- Tools are third-party, no homegrown
- Concerned over AI, technology

Source: Caling, R.R & Palalimpa, R.J. (2023). *The Robot Fact Checker: Prospects and Challenges of Artificial Intelligence Use for Fact-Checking in Online Philippine Newsrooms*

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How newsrooms see AI reshaping journalism

- Find more stories in data; find more data in stories
- Better automated transcriptions
- Enhanced image/video search
- Fake news/deep fakes recognition
- New tools for debunking
- More efficient, automated production of content
- Deeper sentiment analysis on UGC
- Better personalized distribution of content
- Make content moderation manageable
- Dynamic pricing both for ads and subscriptions

Source: Beckett 2023

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Generative AI (GenAI) expands

Microsoft Reveals Major AI Upgrades for Windows, Office, and Bing

Microsoft is integrating AI capabilities like Copilot and DALL-E 3 across its consumer products, aiming to lead the AI assistant race.

Bard can now connect to your Google apps and services

Meta unveils its first gen AI products for consumers

Canva



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Some issues

- Accuracy
 - Limitations arising from info fed
 - 'Hallucination of data'
 - NewsGuard on ChatGPT: 'The next great misinformation superspreader'
- Bias
- Copyright, plagiarism
- Data privacy, cybersecurity
- Transparency, accountability and liability
- Wanted: 'Human in the loop', human oversight

CHAT-GPT 3



Limitations

May occasionally generate incorrect information

May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021

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Associated Press standards around GenAI

- **Accuracy, fairness and speed** are the guiding values for AP's news report, and we believe the mindful use of artificial intelligence can serve these values and over time improve how we work.
- However, **the central role of the AP journalist** – gathering, evaluating and ordering facts into news stories, video, photography and audio for our members and customers – **will not change. We do not see AI as a replacement of journalists in any way.**

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- (W)hile AP staff may experiment with ChatGPT with caution, they **do not use it to create publishable content.**
- Any output from a generative AI tool should **be treated as unvetted source material.** AP staff must apply their editorial judgment and AP's sourcing standards when considering any information for publication.
- In accordance with our standards, we do not alter any elements of our photos, video or audio. Therefore, we **do not allow the use of generative AI to add or subtract any elements.**
- We will **refrain from transmitting any AI-generated images that are suspected or proven to be false depictions of reality.** However, if an AI-generated illustration or **work of art is the subject of a news story,** it may be used as long as it **clearly labeled as such in the caption.**

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- We urge staff to not put confidential or sensitive information into AI tools.
- We also encourage journalists to exercise due caution and diligence to ensure material coming into AP from other sources is also free of AI-generated content.
- Generative AI makes it even easier for people to intentionally spread mis- and disinformation through altered words, photos, video or audio, including content that may have no signs of alteration, appearing realistic and authentic. To avoid using such content inadvertently, journalists should exercise the same caution and skepticism they would normally, including trying to identify the source of the original content, doing a reverse image search to help verify an image's origin, and checking for reports with similar content from trusted media.
- If journalists have any doubt at all about the authenticity of the material, they should not use it.