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AN MX3 LEADERSHIP REPORT PRODUCED BY DI5RUPT FOR FIPP

REPORT AT A GLANCE



AI is back in the spotlight again thanks to growing use of tools by media companies and the launch of ChatGPT.



Some publishing companies have recently been criticised for using automated content. In reality many companies have been doing this for years.



AI has had a wide role in the media industry for years, in journalist tools, analysing advertising and subscriptions data and marketing.



Media are increasingly recognising that AI will have a profound impact on its future.



It could lead to a new generation of startups who leverage its automated content to scale quickly.



Some in the industry seem to be taking a 'wait and see' approach to ChatGPT but acknowledge its potential. Others are experimenting with the format.



How Google might respond to massive growth in automated content. What safeguards will it put in place to ensure that biased, untrue and low-quality content don't feature in searches? Also, how might its rival to ChatGPT, Bard, develop?



AI is only going become more sophisticated – publishing companies need to work on strategies for integrating it now.

WHAT THEY'RE SAYING

Some quotes from business leaders and experts on AI and the media. The full report starts from page 7.



"Even if you aren't yet convinced that AI could have much impact on or for your business now, it is at a tipping point for wider use in daily life for all your readers and audiences, and many of your suppliers." **Rich Fairbairn**, Director at Glide Publishing Platform



"The main application of AI for us will be around personalisation – not just personalisation of content but personalisation of experience. Do you want to read, watch or listen? How much time does the consumer have? How does the content adapt to meet the consumer demand in the moment?" **Ramin Beheshti**, Co-founder and President, The News Movement and previously Chief Technology and Chief Product Officer of Dow Jones.



"I would urge every firm to investigate ChatGPT closely, and look into the potential for its usage at an individual use case level. It's also a great place to understand the value and need for good prompt engineering." **Arvind Iyer**, Director of Technology, Springer Nature.



"The striking thing about the reaction to ChatGPT is not just the number of people who are blown away by it, but who they are. These are not people who get excited by every shiny new thing. Clearly, something big is happening." **Paul Graham** Co-Founder of Y Combinator





"Artificial intelligence has long seemed like science fiction, or at least like something for the distant future. ChatGPT is forcing us to confront the big role AI may play in our daily lives – and much sooner than we imagined." **Mike Allen** Co-Founder, Axios



"The less crucial to our democracy, the less politically sensitive, the less divisive the topic of news, the more you can afford to try something." **Ariane Bernard**, a media product expert who leads the Smart Data Initiative at the International News Media Association.



"You can imagine what my content leadership thinks about ChatGPT! But we're going to experiment with it, we're going to learn – and we're going to learn from our audience too."

Bonnie Kintzer, President and CEO of TMB.



"New publishing start-ups, with non-industry funding, going all-in on AI to do things current publishers can't do quickly or won't risk doing. Think fully automated sites and services, new brands, with barely any human intervention. The first strand could most visibly be of entire new sites or services that put AI content generation at their core, with people pulling the AI levers rather than intervening much on individual pieces of content: point your news bots at topics, have them prompt a ChatGPT-like service with a request, and out pops an article."

John Barnes, Chief Digital Officer, William Reed Business Media.





"What is going to be interesting with AI-driven content, which I consider unique to previous tactics to improve rankings, is that AI-driven content, especially at the higher levels, is quite good – sometimes better than human-created content. AI-driven content does not detract from Google's objective, so perhaps we should expect Google to respond differently to it." **Lexi Mills**, a London-based digital marketing authority.



"I worry that just as search engines and mobile devices make it possible for us to outsource memory like phone numbers and facts to technology, AI will make some people even lazier. That said, Plato famously worried that the written word would make it harder for people to remember things, and he was right about that. But isn't it better to be able to read Homer's Odyssey instead of memorising and repeating the entire tale across generations?" **Dan Pacheco**, the Peter A. Horvitz Endowed Chair in Journalism Innovation, S.I. Newhouse School of Public Communications, Syracuse University.



"The need for humans in the loop is going to be less and less for many use cases going from automated to autonomous. For publishing services, human in the loop is often a finishing step required to provide the client with a plug and play product that's brand safe. The more hard modelled the task, the less human intervention."

Francesco Magnocavallo, Product Officer, Contents.com.



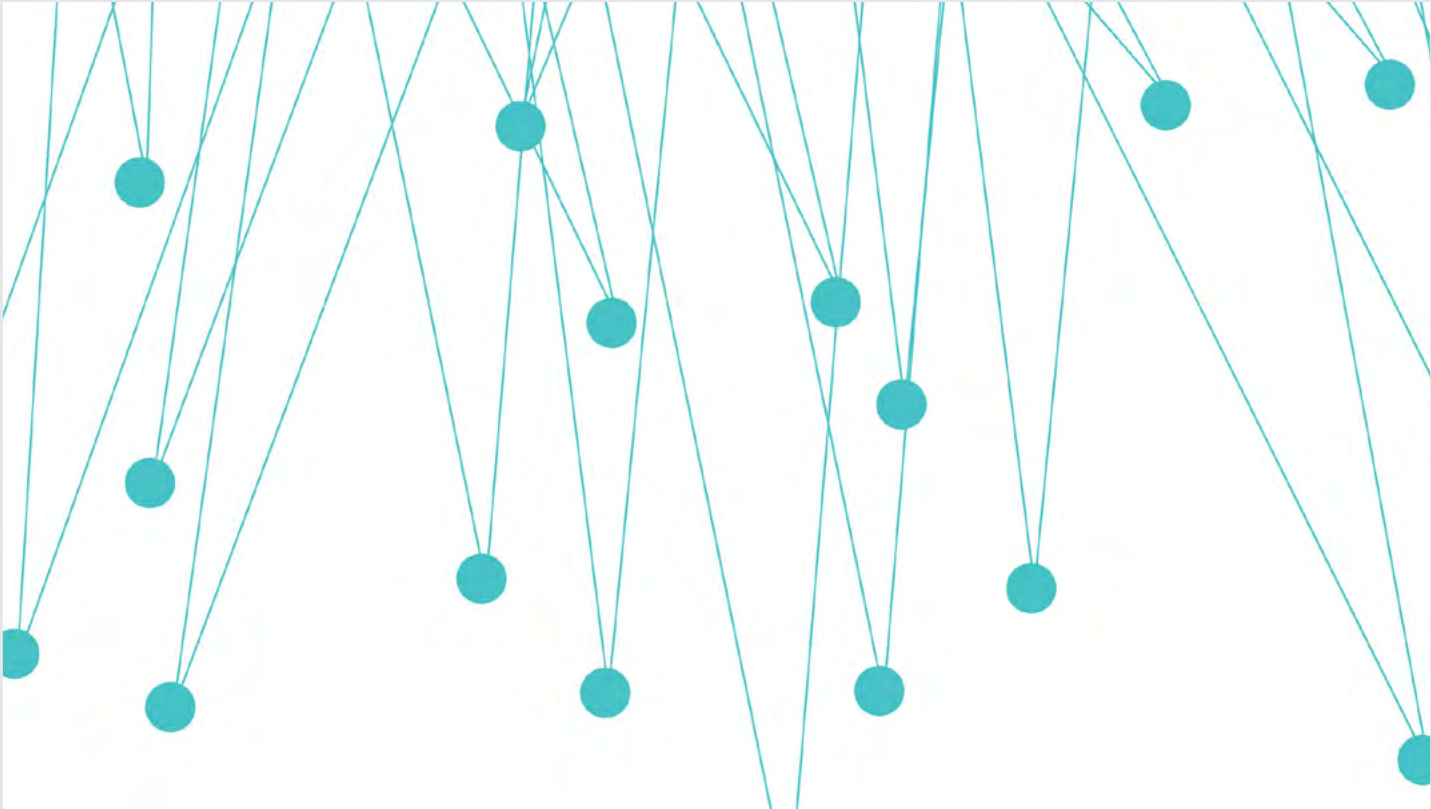


"My concern is that there is still too much hype out around it. Too many people think it's a magic bullet that will solve problems. AI is largely effective only if a company has a strong focus on data capture organisation and processing. The technology will not itself solve the problem. Couple that with a lot of smoke and mirrors from vendors and you have a big perception challenge." **Ramin Beheshti**, Co-founder and President, The News Movement and previously Chief Technology and Chief Product Officer of Dow Jones.



"In the longer term, AI will definitely transform the media industry in every aspect – from content creation to content delivery and content value capture. In the times of 'everyone is a medium and influencer', companies' lack of content strategy will lose to the traffic-based media platform and be eliminated by the competition empowered by AI. I am excited to see the evolution of the media industry by the push from AI revolution."

Jeff Chang, Chief Digital Officer, Condé Nast, Taiwan.



INTRODUCTION

NOVEMBER 30th 2022 might end up being remembered as one of the most pivotal days in the history of tech in the 21st century. Although at the time it didn't especially feel like it.

For on that day via a flurry of tweets and a modest, mainly technical blog post on its website, AI innovators [OpenAi](#) announced the launch of a new machine learning-driven conversational tool [ChatGPT](#).

In reality it was the equivalent of a large explosive device being detonated.

Within hours the site was struggling to cope with the number of visitors keen to try out the new service. The

tech media were on board within days, initially publishing jokey 'is this bot going to steal my job?' articles - which soon turned into more thoughtful pieces as the penny dropped on the potential of the innovation.

Throughout December the constant sharing of content created by the ChatGPT on social channels kept the momentum up and within a week it could boast over a million users.

A few months on from its launch and there is already an industry building around ChatGPT. New media companies have emerged that largely only publish content created by the bot. Meanwhile some tech and content

consultants are now positioning themselves as ChatGPT authorities hoping to explain to bewildered executives how the software would be transformative for the business.

Meanwhile the company that created ChatGPT, OpenAI, finds itself valued at an incredible \$29 billion, with some pundits now predicting that it could one day replace Google as the de facto method of searching the web.

Yet from a technology perspective, ChatGPT isn't especially new or really innovative. It is headline news as it perhaps marks the first time that AI has been accessible to consumers in a way that is easy for them to comprehend.

Over the last decade AI and machine learning have been quietly working their way into many areas of the media from content production through to subs management, advertising targeting and email newsletter personalisation. In fact when **Cnet was found to be using AI to create financial news stories**, a move that drew a lot of instant criticism, it was pointed out that mainstream media companies have been using AI to create sports and finance content for years.

The Associated Press for example, uses AI to produce data-driven **sports stories and templated game recaps**. McClatchy has used automation to cover **real estate listings**. Financial newswires like Dow Jones, Bloomberg and Reuters have **experimented** with automation to streamline coverage of earnings reports and the stock market. **Wolfgang Zehrt**, an AI & Content Expert based in Germany, says he works with over 40 media brands that produce around 1000 automated articles per day.

Now then is a good time to stock up on where AI is in terms of the media.

In this report, industry experts from across the globe will look at the development of AI, how the media has begun to experiment with it, and the impact it will have in the future.

Along the way we will list tools that are useful to media companies and also look at how AI will usher in a new era for media akin to the way search and later social media revolutionised the industry in the early 2000s.

WHAT IS AI?

“Even if you aren’t yet convinced that such AI could have much impact on or for your business now, it is at a tipping point for wider use in daily life for all your readers and audiences and many of your suppliers.”

Rich Fairbairn, Director at Glide Publishing Platform

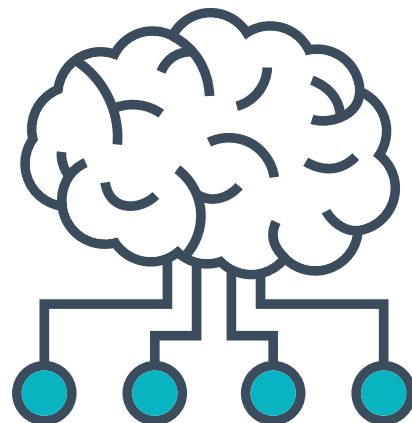
ARTIFICIAL INTELLIGENCE refers to the simulation of human intelligence in machines that are designed to think and act like humans. AI systems, still in its infancy, can perform tasks such as recognition of speech, decision-making, and language translation.



Yet as **Rich Fairbairn** of Glide notes there is confusion as to what it really is and how it works. In particular there is a difference between AI and machine learning. To clarify matters, Machine Learning is a subfield of AI that focuses

on the development of algorithms that enable computers to learn from data, improve from experience, and make predictions or decisions without being explicitly programmed to do so.

Machine learning works in tandem with Natural Language Processing (NLP), a field of artificial intelligence that focuses on the interaction between computers and humans using natural language. The goal of



NLP is to develop algorithms and models that can analyse, understand, and generate human language, allowing for more natural and intuitive communication between people and machines. This involves tasks such as text classification, sentiment analysis, named entity recognition, machine translation, and more.

"Most of the AI people are talking about is not "true AI", but more like Machine Learning and similar 'educatable' software," says Rich. But we're all calling it AI because, well, that's what everyone is claiming it is in their marketing, their news reports, and everything else. It's fair to say that outside of proper computational science circles, the rest of us just see it as a catch all term for 'a leap forward in what software can do when it can learn patterns'.

Read more from Rich Fairbairn [here](#).

Up until recently most of the talk about Artificial intelligence in the mainstream media has been about one of two issues.

Firstly the impact that it might have on the future of work. The theory being that AI will replace humans in

undertaking repetitive work and then potentially some creative work too.

Secondly the focus has been on the ethics of AI. There are the scare stories about autonomous computers that might take over from humans and bring about the end of civilization. Yet more relevant for now is the way in which AI can develop unconscious biases which might mean, for example, when processing people for jobs it favours applicants of a certain class or colour.

There are also interesting examples of bias in Mo Gawdat's book Scary Smart about Microsoft's Twitter bot Tay a while ago who became pro-Hitler; Alice, a Russian version of Siri became pro-violence and endorsed Stalin's brutality. Norman, an MIT bot, became a psychopath based on biases people (trolls) fed them in interactions.

The last couple of months have seen those debates broaden as thousands of individuals across the globe had witnessed through ChatGPT how AI can be harnessed to create efficiencies in the content and research sides of their business. The leap of perception in AI has been huge.

AI'S ROLE IN THE MEDIA

“The main application of AI for us will be around personalisation. Not just personalisation of content but personalisation of experience. Do you want to read, watch or listen? How much time does the consumer have? How does the content adapt to meet the consumer demand ITN what they want? Rather than just the same content for each person.”

Ramin Beheshti, Co-founder and President, The News Movement and previously Chief Technology and Chief Product Officer of Dow Jones.

JOURNALISM TOOLS

* Transcription

[Otter.ai](#) which uses machine learning to record a call which it transcribes on the fly is widely used by journalists. Rivals include [Sembly](#) and [Airgram](#)

* Translation

Google and Microsoft both have widely used machine-learning based translation tools. Others include [DeepL](#), [Smartling](#) and [Phrase](#). There is a good list [here](#).

* Research

Many journalists have already reported

that ChatGPT has become a key part of the arsenal. Not for creating content but for research. It delivers succinct, yet potentially detailed descriptions which can often help journalists to understand complex topics quickly.

ADVERTISING AND MARKETING TOOLS

* Analysing data

Analysing data sets given to AI as CSVs and asking it to help find facts and trends for stories. AI can be used to make predictions, identify patterns and uncover insights.

* Audience segmentation

(AC, [Piano](#), DMP, etc.) and calculated metrics, for example Piano can segment users into buckets as to how likely they are to take out a subscription.

* Chatbots

AI can be used to create chatbots and automated responses for customer service, which could lead to the automation of customer service jobs. There is a good list [here](#).

* Email marketing

There are many tools that enable companies to personalise their online communications. List [here](#).

* Legal

AI can be used to fight copyright infringement by automating the process of monitoring for duplicated content in the media space

CREATIVE TOOLS

* Creating images

Creating imagery for feature stories, or experimenting with ideas that real artists complete. [Midjourney](#) is the most high profile, but others are [listed here](#).

* Writing code

Companies are increasingly using AI to write code for website templates,

web-based AR and VR, and functions for interactive environments in Unity and Unreal Engine to help speed up production of immersive story creation.

* Content strategy

AI can work in a number of ways from spotting keywords, coming up with content ideas, and helping to personalise that content. Key companies include [Crayon](#) and [HubSpot](#), others get a mention [here](#).

Jeff Chang, Chief Digital Officer, Condé Nast, Taiwan, says one of the key uses for AI is in advertising.

“Many media companies use AI to match the content or native advertising relevant to user’s interests by the tags or keywords from proactive search or passive recommendations. The matching efficiency comes largely with the level of capability in natural language processing NLP algorithms or machine learning.

“I would like to see more exploration in understanding audience needs through AI-led content interaction.”

Read more from Jeff Chang [here](#).

AUTOMATED CONTENT

THE USE of automated content in the media isn't new. In fact it dates back to the early 1960s, when computer systems were first used to generate news articles.

The first successful system was named "WINDS" (World News and Data System), and it was created by the Associated Press (AP). The system was designed to generate articles on routine topics such as financial reports, stock prices, and sports results.

It has set a precedent that has been copied up until today in that bots take basic information and then turn that data into stories.

Since then almost every major new organisation has published automated content including

- * **Associated Press (AP):** One of the first media companies to use automated content which now includes

financial reports, stock prices and sports results.

- * **Thomson Reuters:** Developed the AutoNews system for generating articles on financial data.

- * **The Washington Post:** AI content includes weather and sports results.

- * **The New York Times:** AI finance articles include earnings reports.

- * **Bloomberg:** Newsrooms use AI for reports on company earnings and economic trends.

- * **BBC:** Automated content includes weather and sports results.

- * **Deutsche Presse-Agentur:** Topics include stock markets and weather.

- * **Axel Springer:** Content includes articles on company earnings and financial market data.

* **Burda News:** AI generates weather forecasts and sports results.

* **Handelsblatt:** Topics include company earnings and financial data.

* **Le Monde:** AI articles include company earnings and financial data.

* **Dagens Nyheter:** Weather forecasts and sports results.

* **Yomiuri Shimbun:** Uses AI for articles on topics such as company earnings and financial markets.

* **China Daily:** Weather and sport.

* **South China Morning Post:** AI content includes company earnings and financial market data.

* **The Hindu:** Weather and sport.

A fast-growing list of automated content providers includes:

* **OpenAI:** Has developed AI models for natural language processing and involved in numerous high-profile media projects. The company behind ChatGPT

* **Articoolo:** Content creation services for businesses and publishers using deep learning algorithms to generate articles on a wide range of topics, including finance, technology and entertainment.

* **United Robots**
Content based on data science, AI and Natural

Language Generation, delivering automated texts, images, graphics, maps and metadata. Also has a focus on local journalism.

* **Narrative Science:**
Reports and articles in a variety of formats, including long-form articles, infographics and social media posts.

* **Wordsmith:**
Automated content creation, analysing data sets and creating articles, reports, and other content in minutes.

* **Yseop:** Automated writing includes reports and other documents. Boasts fast content production.

* **Quill:** An AI-powered writing assistant that helps content creators quickly produce content. Uses natural language processing and machine learning to offer sentence structure, grammar, and tone.

* **AX Semantics:** A content creation platform that uses AI technology to generate natural language text based on data inputs.



Wolfgang Zehrt, AI and Content Expert, based in Germany who consults with several automated media companies explains how the process works

"We currently work for five publishing houses and a total of 40 publications: From a regional daily newspaper to a leading German national newspaper to newspapers and trade portals in

the USA and Asia. We publish about 1,000 articles daily. Of these, about three-quarters are articles from data generated together with graphics, and the future with AI-generated images.

"About a quarter of the articles are existing texts that are revised by our tool. These are mainly press releases that are reformulated into factual reports or announcements of court decisions that are transferred into everyday language.

"In our sandbox www.digitaldaily.de all kinds of automated content is visible, including text done by a prototype of GPT 4 (the latest iteration of OpenAI's automated content offering)."

Read more from Wolfgang Zehrt [here](#).

CHATGPT: THE WATERSHED



“At a broad level, I would urge every firm to investigate ChatGPT closely, and look into the potential for its usage at an individual use case level. It’s also a great place to understand the value and need for good prompt engineering.”

Arvind Iyer, Director of Technology, Springer Nature

WITHIN DAYS of ChatGPT’s launch, The New York Times hailed ChatGPT as “the best artificial intelligence chatbot ever released to the general public”, while Paul Graham of Y Combinator – which had been involved in the success of Airbnb, Dropbox and Quora – tweeted “the striking thing about the reaction to ChatGPT is not just the number of people who are blown away by it, but who they are. These are not people who get excited by every shiny new thing. Clearly, something big is happening.”

ChatGPT (in its own words)

“ChatGPT is a language model developed by OpenAI, which uses deep learning algorithms to generate text in a conversational style. It works by predicting the next word in a sequence of text given previous words as input, based on patterns learned from vast amounts of text data. ChatGPT is used for various conversational AI applications, such as chatbots, virtual assistants, and customer service bots, to provide human-like responses to text input.”



Writing for Axios Mike Allen said “Artificial intelligence has long seemed like science fiction, or at least like something in the distant future. ChatGPT is forcing us to confront the big role AI may play in our daily lives – and much sooner than we imagined.”

Essentially think of ChatGPT as a search engine on steroids. You ask it a question and it skims the data that it has stored to construct a response for you. That response can be a quick definition, a blog post, an essay or even a whole report. So much depends on

the information that you have and the way that you instruct it. The questions you ask it are called prompts. The more detailed the question invariably the fuller and more useful the answer.

What blew people away was how it could be used to write a story or indeed something creative like a poem or song in the style of a famous artist.

Not everyone was impressed. Australian born, UK-based singer songwriter Nick Cave was sniffy about the lyrics it wrote in his style. “Since its launch last year many people, most buzzing with a kind of algorithmic awe, have sent me songs ‘in the style of Nick Cave’ created by ChatGPT.” he said.

“There have been dozens of them. Suffice to say, I do not feel the same enthusiasm around this technology. I understand that ChatGPT is in

its infancy but perhaps that is the emerging horror of AI – that it will forever be in its infancy, as it will always have further to go, and the direction is always forward, always faster.”

However ask ChatGPT to write an essay about ‘how George Orwell might see the future of the media’ and you chances are you will be impressed by the results, which not only encompasses the English writer’s ideals as outlined his novels and essays, but also makes prescient predictions about the future of AI generally.

If you think that it might then be time to replace your editorial team with the bot it is worth considering what it cannot do.

- * It is not up to date. In theory all its learning ended in 2021. So it can’t write news articles. Well not yet
- * It can make mistakes - Not that often, but it is capable of some real howlers such as “it takes 9 women 1 month to make a baby.”
- * There is no reference as to where the information is coming from

- * There are elements of unconscious bias

- * It is as useful as the amount of data it has on a topic. Anything over 10,000 citations tends to be sound. Ask it to compare long-forgotten 80s vintage bicycles and you will get a virtual shrug

- * It sits on the fence - a lot. It hasn’t really been designed to make choices as to whether X is better than Y. It presents what it sees as fact and leaves the reader to make their own mind up

Wolfgang Zehrt feels that there are privacy and ethical concerns too. “It requires large amounts of data to train its models, so there are concerns about the privacy of the data that is used to train it. Also as the text is very similar to human writing, this raises ethical concerns about the authenticity of the text it generates and the implications of using it.”

There are limitations to how ChatGPT can be used in creating up to date relevant content. Zehrt adds: “For the media, it is important to have in mind that OpenAI’s models and tools are

not working with current data because they are not real-time systems, they are trained on a large dataset with a certain knowledge cut-off. Additionally, the models are not updated in real-time, so they may not reflect the most recent changes in the data they were trained on. To ensure that the models are working with the most current data, the data should be updated and the models should be retrained. This process can be time-consuming and requires significant computational resources.

It's also important to note that OpenAI's models, like any other AI model, can't account for all the events, trends, or information that is happening in the current moment, as they are not able to incorporate new knowledge or experience, they only can provide information based on the data they have been trained with. For this reason, by using a self-developed tool we integrate our real-time data into OpenAI systems. The whole process is still 100% automated."

Where ChatGPT is especially strong is in evergreen content and especially in niches like technology and business. Ask it for example, for an explanation

of the technology underpinning cryptocurrencies and you get a thoughtful, detailed and concise answer.

There is also arguably a cleanliness about its prose. It is very factual, uses short sentences and paragraphs and is designed to be simple to read.

Quite how this might impact on the output of media companies remains to be seen. At the [Disrupt MX3 event in Berlin](#) in October there were discussions about the continuing value of evergreen content. But ChatGPT might change that forever.

At the moment only a handful of mainstream publishers or news organisations will admit to using ChatGPT to create stories, but that hasn't stopped many experimenting with it.

"As the text is very similar to human writing, this raises ethical concerns about the authenticity of the text..."

**Wolfgang Zehrt,
AI & Content Expert**



Ariane Bernard, a media product expert who leads the Smart Data Initiative at the International News Media Association sums it up best “I do think that the less crucial to our democracy, the less politically sensitive, the less divisive the topic of news, the more you can afford to try something.”

At the current time using ChatGPT to write stories is probably not worth the risk especially for new companies who pride themselves on authenticity and having the trust of their readership.

It seems at the moment that companies are using bots to generate copy but then spending significant amounts of time using humans to monitor what has been created. Tools are being used, but humans are part of the end-to-end process.



Bonnie Kintzer, President and CEO of TMB told [WNIP recently](#): “You can imagine how my content leadership thinks about ChatGPT! But we’re going to experiment with it, we’re going to learn, and we’re going to learn from our audience too. I’ve been on it and tried it out, both humorously and seriously, and the results were mixed – I asked it about a bug, and it gave me the correct answer, but a sixth grader could have also told me that. So, it depends, but we will experiment, we will learn and we’ll most definitely react accordingly.”



IMPLICATIONS FOR THE INDUSTRY

ONE CLEAR side effect of ChatGPT is that it is likely to empower a generation of startups.

John Barnes, Chief Digital Officer, William Reed Business Media, explains how this might work. “New publishing start-ups, with non-industry funding, going all-in on AI to do things current publishers can’t do quickly or won’t risk doing. Think fully automated sites and services, new brands, with barely any human intervention.

“The first strand could most visibly be of entire new sites or services that put AI content generation at their core, with people pulling the AI levers rather than intervening much on individual pieces of content: point your news bots at topics, have them prompt a ChatGPT-like service with a request, and out pops an article.

“Then what? Model around advertising and affiliate revenue and gobble up traffic by being quick and comprehensive, or find highly-targeted



John Barnes,
Chief Digital
Officer,
William Reed
Business
Media

subscription and B2B channels where speed of information matters much more than grammatical flair or particularly special insight - results, events, and data-driven types of products.

"These disruptive entrants could be similar to what Axios or The Athletic were, coming from fresh waters and growing very rapidly, but it could just as likely be Facebook, or Google, or Twitter. Who knows, if they feel the cash-for-content deals being forced by legislators are too punitive, I'd be surprised if they do not look to their own versions of ChatGPT to procedurally generate news and answers and cut out publishers."

John says the key issues that the new breed of publishers will ultimately face is whether their content is of the same standard as that generated by humans.

"Their battle - and in fact probably the AI battle in this space - will be for those providers to convince people their AI content is more trustworthy and accurate than other AIs, or has sufficient human oversight to be above criticism. In fact, ironically given how the question of trusting AI is a legitimate question, look for a drive by some to eventually claim their AI news is more trustworthy than that created by humans."

Read more from John Barnes [here](#).

The future of search

The elephant in the room when it comes to how useful these startups will prove to be is ironically Google.

Lexi Mills is a London-based digital marketing authority with a specialism in the intersection of SEO, content and PR. She believes that the company has some interesting cards to play both in the short and medium terms.



Lexi Mills,
SEO and
digital
marketing
specialist

"If we look at how Google has historically handled 'hacking of the algorithm,' we can perhaps see how it might adapt to AI-generated content. More importantly we see that AI and ML driven content and how it interacts with Google will have significant influence on the future of economies, politics, democracy, publishing and technology itself.

Google's mission is to organise the world's information and make it universally accessible and useful. Its ranking formula/ algorithm is designed to aid this goal. Historically SEOs have tried to reverse engineer this in order to gain more traffic and visibility for their websites. Every time a tactic designed to 'trick' the algorithm has been identified and done at scale Google has rolled out an update to counter this. For example, Panda, Penguin etc.

"Now, these examples had both positive and negative impacts. Some media sites were badly hit with these, and in some cases, they were not trying to go against google's guidelines but still got penalised for some of their activities. I think it's reasonable to presume there will be some casualties as Google attempts to figure out how

to handle mass volumes of new content written by AI."

Yet Lexi feels that Google may have issues working out what is human-generated and what is created by a bot.

"What is going to be interesting with AI-driven content, which I consider unique to previous tactics to improve rankings, is that AI-driven content, especially at the higher levels, is quite good. Sometimes better than human-created content. AI-driven content does not detract from Google's objective, so it leaves me to think that perhaps we should expect Google to respond differently to it.

"AI is not always great at understanding sentiment or context; thus, it can reference sources that it has misunderstood. Google is going to have to up its game with regard to machine-driven sentiment and context analysis and better fact-check volumes of AI-driven content to ensure it provides the best results for its users.

"This presents an opportunity for smaller companies to potentially own larger sections of rankings and internet real estate without the price

tag, so at least for a while, I think we should expect AI-driven content to potentially provide an advantage to those who use it well at least until Google's algorithm updates."

One of the most interesting questions surrounding Chat GPT is whether it might eventually displace Google? There are already add-ons for the Chrome browser that enable users to see results from ChatGP (if they're logged in) in tandem with traditional search results. Given Microsoft's heavy involvement with ChatGPT might it be that it provides the basis for the next generation of its search engine Bing?

And there could be other implications for search and the internet more generally too.

Dan Pacheco is the Peter A. Horvitz Endowed Chair in Journalism Innovation, S.I. Newhouse School of Public Communications, Syracuse University. He has experimented with AI in a number of ways and is very aware that his students may already be using ChatGPT to help construct their essays. He does wonder if AI will make us even lazier than we already are...



Dan Pacheco,
chair in
Journalism
Innovation,
Syracuse
University

"The bigger thing I worry about is that, just as search engines and mobile devices make it possible for us to outsource memory like phone numbers and facts to technology, AI will make some people even lazier. That said, Plato famously worried that the written word would make it harder for people to remember things, and he was right about that. But isn't it better to be able to read Homer's Odyssey instead of memorising and repeating the entire tale across generations?

"I do think that we will need to make ourselves work to not become so dependent on AI and technology that we can't survive without it. Taking time out to just live and breathe biologically without technology to help us will become an even more important life skill over time thanks to AI."

Read more from Dan Pacheco [here](#).

Implications for staffing levels

So what then are the implications for publishing companies from a staffing perspective? What should media companies and their staff do to stay relevant as AI increasingly permeates the world of work

"I don't think we are in a position to talk any more deeply than this than the likes of the World Economic Forum and Harvard and others who do studies on AI," says **Rich Fairbairn** of Glide.

"The general consensus is that more jobs will be created than will be replaced, and I tend to believe that will be the case for publishing too.

AI needs managing, it needs training, it needs improving, it needs redirecting, it needs overruling, it needs fixing, all things that will be turned over to people to do. And the better you are at those things, the more likely you are to find a better space for yourself within an AI-driven publishing future. And all those things need an understanding of content and audiences, and specifically your content and your audiences.

"Across the spectrum of media roles, at a high level what AI will be doing is

allowing them to compete better and with less low-value drag from the kind of tasks we have all secretly wanted to be able to automate anyway: the dull but necessary."



Francesco Magnocavallo, Product Officer, Contents.com, believes that companies will take different approaches depending on the nature of the content.

"The need for humans in the loop is going to be less and less for many use cases going from automated to autonomous. For publishing services, man in the loop is often a finishing step required to provide the client with a plug and play product that's brand safe.

"The more hard modelled the task, the less human intervention. In one

example e-commerce application we managed for Accenture, this amounted to 1 minute per product listing, just to ensure 100% quality output. On the other hand, one large Italian newspaper publisher prefers to show raw machine output to newsroom people and have them apply the last retouching to their titles and summaries: you don't always want to outsource this sort of sophisticated editing."

Read more from Francesco Magnocavallo [here](#).

AI will impact on potentially all areas of publishing in a deeply profound way. It will unleash a new wave of digital transformation that will create both issues and opportunities. Ultimately though, media companies and their teams are going to need to learn to live and work with AI. To focus on how to take advantage of its innovations while keeping 'humans in the loop.' It is too late already to take a 'head in the sand approach.'

TAKE-AWAYS

01

REGULATION IS COMING

Arvind Iyer, Director of Technology,
Springer Nature, Portugal

"AI will firmly embed itself into the future of work and society. I am particularly hopeful about how quickly it will get adopted, at all levels. The numbers for Chat GPT's extraordinary adoption is a good indication.

"I am also excited by the progress shown by large parts of the world in working with AI. While regulations and standards by governments and multilaterals are progressive steps in the right direction, what is also interesting is the impact of firms within the space. Leading players across many sectors are heeding the concerns of various stakeholders and are taking steps towards ethical AI. And it shows.

Take two examples: Meta's Galactica LLM was withdrawn in about 3 days because its team had concerns about bias; while Google refused to let anyone use its freely available Colab notebooks to build Deepfakes."

02

THERE WILL BE AN AI OVERLOAD

Rich Fairbairn, Director at Glide
Publishing Platform

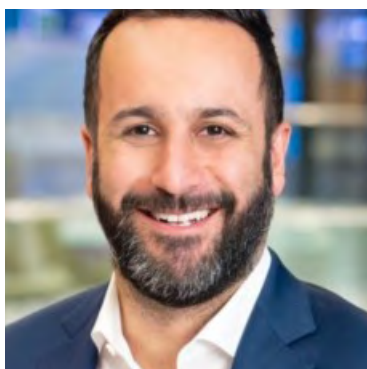
"There will be a vendor overload, and a blizzard of "AI for everything" from firms with no previous experience in the publishing space - treating you like any random business. Also, watch out for an overreach of ambition from within your own organisations.

"In the same way we tell publishers they should not be CMS companies, you should remind yourself you are not an

AI company. You are just looking for a tool that does a specific thing: the AI label is almost irrelevant. It should be a way of improving something that you already understand well and know how to improve. If you do not know what AI is going to solve, then you probably don't need what's being offered."

03

BEWARE THE HYPE



Ramin Beheshti, Co-founder and President, The News Movement and previously Chief Technology and Chief Product Officer of Dow Jones

"There is still too much hype out there. Too many people think it's a magic bullet that will solve problems. AI is largely effective only if a company has a strong focus on data capture

organisation. The technology will not itself solve general problems. Couple that with a lot of smoke and mirrors from vendors and you have a big perception challenge."

04

SIGNIFICANT CHANGE

Jeff Chang, Chief Digital Officer, Condé Nast, Taiwan

"AI will definitely transform the media industry in terms of content's creation, delivery and value capture. In the times of 'everyone is a medium and influencer', companies' lack of content strategy will lose to traffic-based media and possibly be eliminated by competition empowered by AI. I am excited to see this evolution of media by the push from AI revolution."



AI TOOLS TO EXPLORE



→ **OpenAI Playground** (*text*)

Allows you to paste chunks of textual information into a form. Write what you want the AI to do with it in the first line.

→ **OpenAI GPT-3 Chat** (*text*)

Chat with the AI and ask it to do things. Note that you can keep asking it to refine what it sends back to you in a conversation, as if you're guiding an intern.

→ **OpenAI DALL-E-2** (*images*)

Chat with the AI to create images.

→ **Midjourney** (*images*)

Chat with the AI to create images. Requires a Discord account.

→ **AIVA** (*music*)

Writes musical scores that begin with genre-centred templates. Once the score is created, you can edit it in a Pro Tools-like interface. (Note, this appeared on this list of 7 other music generators on the Unite.ai site.

→ **Stable Diffusion** (*text*)

A latent text-to-image diffusion model capable of generating photo-realistic images given any text input.

→ **IBM Watson Studio**

AI platform that allows companies to build, train, and deploy machine learning models.

→ **Google Cloud AI**

Offers a wide range of AI services such as natural language processing, image and speech recognition, and machine learning.

→ **Microsoft Azure**

AI platform that provides tools and services for building, deploying, and managing AI models.

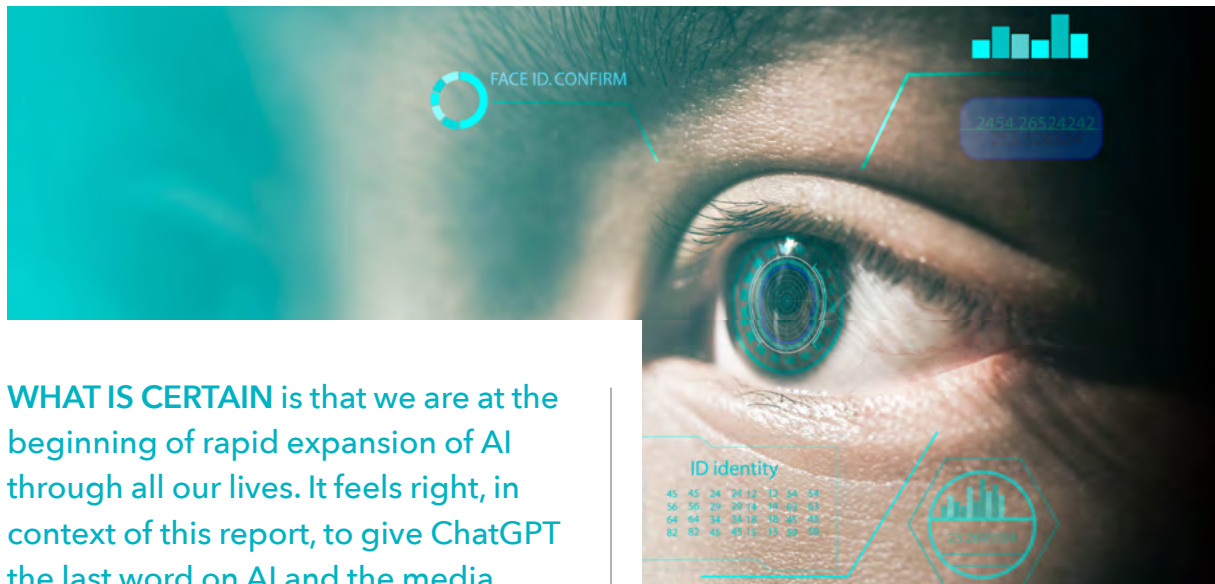
→ **OpenAI GPT-3**

Language model that can be used to generate human-like text and can be integrated into a wide range of applications.

THE FINAL WORD

A.I. and the future of media

ChatGPT responds



WHAT IS CERTAIN is that we are at the beginning of rapid expansion of AI through all our lives. It feels right, in context of this report, to give ChatGPT the last word on AI and the media.

Artificial Intelligence (AI) has the potential to be both good and bad for media, depending on how it is used and regulated. On one hand, AI has the potential to improve efficiency, personalisation, accuracy, and creativity in the media industry. It can also provide new opportunities for innovation and growth in the industry.

On the other hand, AI also poses several risks, such as perpetuating and

amplifying bias, leading to job losses, eroding trust in media, spreading fake news, and being used for propaganda.

It is important to approach AI in the media with caution and develop responsible practices and regulations to mitigate the risks and maximise the benefits. The overall impact of AI on the media will depend on how the technology is used, regulated, and integrated into the industry.

ADVANTAGES

01 Increased efficiency: AI can automate many tasks, from content creation to distribution and monetisation, making the media production process more efficient and cost-effective.

02 Personalisation: AI can analyse vast amounts of data about individuals, providing personalised content and improving user engagement.

03 Improved Accuracy: AI can assist in fact-checking, verification, and analysis of sources, leading to more accurate and trustworthy reporting.

04 New Opportunities for Creativity: AI can help to generate new forms of media and art, providing new opportunities for creativity and expression.

05 Better Analytics: AI can provide real-time insights and analysis of audience behaviour, allowing media companies to make data-driven decisions and optimise their strategies. Overall, AI has the potential to transform the media industry and enhance the quality, accessibility, and impact of media for both creators and consumers.

RISKS

AI also poses several risks for the future of media, including ▼

01 Bias and Discrimination: AI algorithms can perpetuate and amplify existing biases in society, leading to discriminatory outcomes and a skewed representation of reality in media content.

02 Loss of Jobs and Skills: The automation of many media-related tasks by AI can lead to job losses and a decrease in the demand for certain skills, potentially having negative impacts on workers and communities.

03

Decreased Trust: If AI-generated media content is inaccurate, biased, or manipulated, it can erode public trust in media and journalism.

04

Algorithmic Propaganda: AI can be used to generate fake news and manipulate public opinion, undermining democratic processes and the integrity of journalism.

05

Lack of Regulation: The rapid development of AI in the media industry raises important questions about accountability, transparency, and ethical use, which are yet to be fully addressed by laws and regulations.

It is unlikely that all media operations will be created or managed solely by AI in the future. While AI will likely play an increasingly important role in automating and improving many tasks in the media industry, human creativity, expertise, and judgement will continue to be essential components of the media landscape.

For example, while AI may assist in the creation of content, human writers, journalists, and artists will continue to play a crucial role in shaping the narratives, messages, and styles of media. Similarly, while AI may be used to analyse audience behaviour, human editors, marketers, and managers will continue to play an important role in determining the strategy, direction, and focus of media operations.

Therefore, it is likely that the media industry will continue to be a collaboration between humans and AI, with each bringing unique strengths and perspectives to the process. The role of humans in the media industry will evolve as AI becomes more sophisticated and integrated, but it is unlikely that humans will be entirely replaced by AI.

“The overall impact of AI on the media will depend on how the technology is used, regulated, and integrated into the industry...”

ChatGPT

A.I. AND THE WORLD OF WORK

A HUMAN RESPONDS

In a recent newsletter, **Scott Galloway**, Clinical Professor of Marketing and Founder of Section 4, writes about Luddites in 1589 opposing the introduction of the sewing machine in fear of job losses.

Galloway argues that while technological advances such as AI may lead to short-term disruption of jobs, it can also bring long-term growth.

“The philosopher’s stone of capitalism is technological innovation. It’s no accident capitalism flourished and spread across the globe contemporaneously with the adoption of new technologies in production,



transport and information. Each technological advance unlocks more space for ambition – new goods, better ideas, and richer experiences. And that economic expansion creates more opportunities for ambition. More wealth, more innovation ... more jobs. Wash, rinse, repeat.”

BUCKLE UP: THE RACE IS ON

The battle for AI dominance has begun, with Microsoft **investing heavily in Open AI** and announcing **AI-powered enhancement** for their Bing search engine and Edge browser. Meanwhile, Google **has announced Bard**, a conversational AI service, and Baidu says its launch of **‘Wenxin Yiyao’** (or “ERNIE Bot”) is pencilled in for March.

Follow the links below for the interviews with the AI media experts we directly spoke to:



John Barnes



Arvin Iyer



Ramin Behesthi



Francesco Magnocavallo



Jeff Chang



Dan Pacheco



Rich Fairburn



Wolfgang Zehrt

This report was written by **Ashley Norris**, based on email interviews conducted by **Cobus Heyl**, co-founder of Di5rupt, plus further desktop and ChatGPT research.

The report is independent and not influenced by any supporting company's agenda.

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