State of Play:
Exploring Generative AI's Transformative Effects on the Media & Entertainment Industry

ENDERS | ANALYSIS

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PREAMBLE

Generative AI, or Gen AI, is a branch of Machine Learning, a subfield of Artificial Intelligence (AI), that involves training a model to produce new data that is similar to given data. As such, Generative AI can be used to create, edit, modify or analyse content such as text, still and moving images, sounds, and software code. With the models improving at a rapid pace, new Gen AI tools are being rolled out into the market for creators and businesses to use at an almost weekly cadence. Nonetheless, the impact of this technology on the economy and society remains uncertain, with forecasts varying from modest efficiency improvements to transformative business models and discussions about how governments and corporations can strike an appropriate balance between technological progress and necessary regulation.

In this White Paper, we aim to explore the state of play for Gen AI in a selection of media and creative industries. We will examine how media companies are experimenting with Gen AI across their value chains to improve operations, create content, and enable new services. We will also look at the differences in opportunities and challenges across different media sectors, such as broadcasting, marketing, publishing, and recorded music. By responsibly seizing these opportunities, we believe that Gen AI can enable a new era of innovation and reshape these industries.

Media companies have long used AI to automate content recommendation, personalization, and ad targeting. They are now experimenting with Gen AI to create content more quickly, efficiently, or in entirely new ways. Pre/Post production, distribution, and marketing are being augmented by Gen AI, with intelligent personalization, conversational interfaces, and image generation. There are a raft of AI partnerships being forged between media companies and technology providers, both large and specialized.

There are differences by media sector. Marketers are rapidly embracing Gen AI tools, and AI offers clear opportunities there for both efficiencies and new product offerings. Broadcasting, too, has many functions amenable to Gen AI augmentation. While there are potential benefits to recorded music, they are being embraced at a slower rate; publishers, meanwhile, are proceeding very cautiously. The varying rates of progress offer chances for knowledge exchange and learning from the experiences of early adopters.

Looking ahead, there is the potential for entirely new products or business models enabled by Gen AI in the media, such as fully bespoke content made for a single consumer, user generated tools that enable individuals to create substantial creative works in short spaces of time, or newly interactive products.

The paper is structured into three chapters, each exploring a different aspect of Gen AI in the media and entertainment industry. The first chapter explores into the current state of experimentation with Gen AI in the industry, highlighting how media companies are using these tools to improve operations, create content, and enable new services. The second chapter examines the foundational models of Gen AI and the interaction between the media industry and both major and minor technology providers. Finally, the third chapter explores the challenges and debates surrounding the adoption of AI in the industry, and how businesses are reacting to these issues. Through these three chapters, the paper provides an overview of the opportunities and challenges presented by Gen AI in the media and entertainment industry.

01

Exploring the State of Play: Gen AI Experimentation in the Media Industry

Arthur D Little conducted (June-Sept, 2023) an extensive survey of the Media Industry focusing on Gen AI cases, commissioned by Bertelsmann. It covered over two hundred Gen AI models and applications spanning the entire Media Value Chain. Furthermore, ADL observed over sixty technology partners, from tech giants to specialist providers, ensuring a diverse perspective on the evolving role of AI.

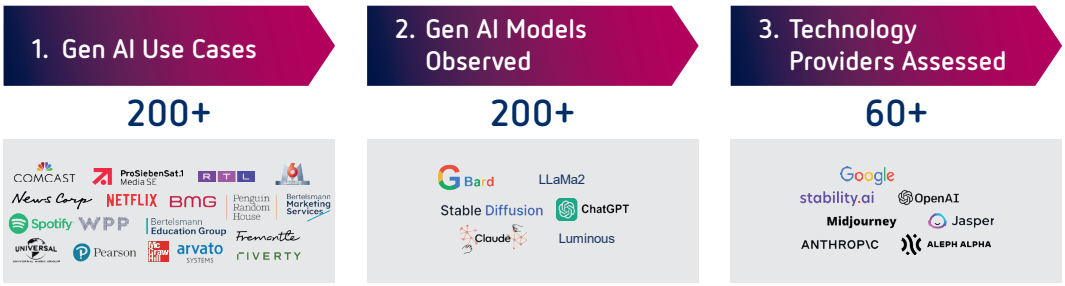


Figure 1. Arthur D. Little Gen AI study

The study examined a wide range of segments, including Broadcast, Entertainment & News, Music, Marketing, and Book Publishing, delving into critical sub-segments such as content generation, instrumentation, creative collaboration, localization, sales chatbots, marketing, and analytics.

The Broadcast, Entertainment & News sector emerged as a frontrunner in adopting Gen AI for content creation, localization, and marketing. Meanwhile, the Music sector concentrated on instrumentation, collaboration, and marketing, and Marketing explored idea generation, analytics, and campaign/advertising placements. In Publishing, Gen AI made strides in content generation and editing, language and localization, sales chatbots, and discovery.

Global media giants like WPP, Bertelsmann, Disney, Reuters, and Universal have quickly grasped the potential of Gen AI tools, eagerly exploring their applications across diverse media businesses. These players are forming dedicated task forces to unlock the full power of Gen AI across various segments.

Figure 2. Analysis of Use Case Activity Across Media Industry Sub-Segments

N=160 cases (including Education) Source: Arthur D. Little Analysis

We look at the four major segments of the Media & Entertainment industry.

1. BROADCAST, ENTERTAINMENT & NEWS

Content creation and production

Gen AI is used in automated script writing assistance, news and image generation. Emerging applications like hyper-personalization and interactive storytelling are gaining traction, with support from technology partners such as OpenAI, Runway, Midjourney, and Synthesia.

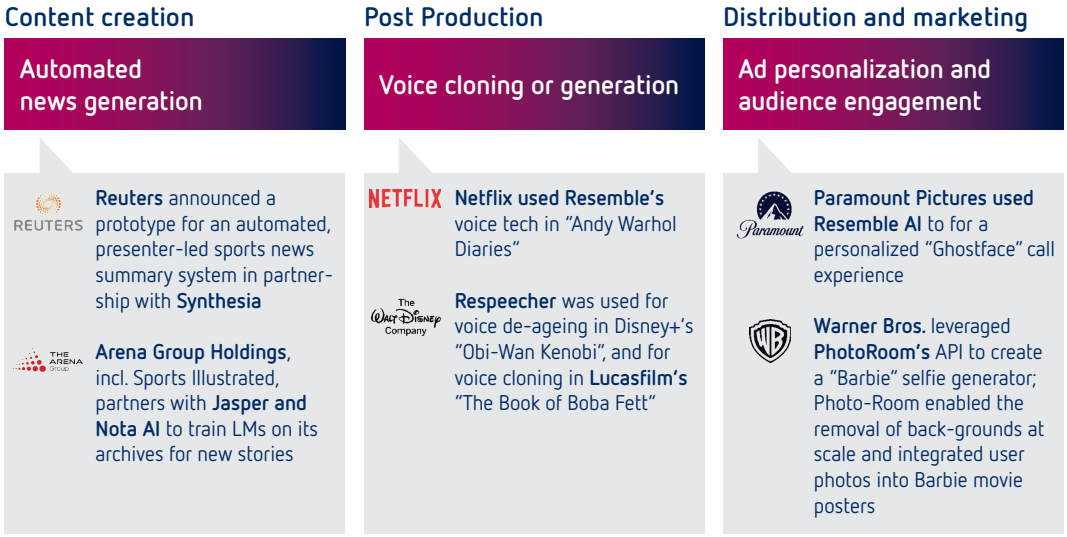


Figure 3: News, Entertainment and Media Use Case examples | Source: Arthur D. Little

Post-production

Gen AI is being used for voice cloning, special effects and background alterations, content summarization and localisation (transcription, captioning/subtitling, automated language translation and dubbing). Industry players such as Disney, Netflix, and YouTube are actively engaged in these advancements. They work with technology partners like Runway, Resemble AI, Respeecher, and OpenAI. Bertelsmann is also in collaboration with Papercup and ElevenLabs for subtitling and voice synthesis. ElevenLabs AI-powered audio fixing technology can help avoid days of reshoots or automated dialogue replacement recording.

Distribution and marketing:

Key players like NBCUniversal (Comcast), Paramount, Sony, and Warner Bros. are using Gen AI to create engaging marketing campaigns, especially in tandem with film launches (see Figure 3).

Figure 4: Screenshot from „Stars on Mars“

“Stars on Mars“: Fremantle‘s Eureka Partners with Eleven Labs for AI-Enhanced Localization Fremantle‘s Eureka collaborates with Eleven Labs to revolutionize the post-production and localization process using generative AI for dubbing, voice synthesis, and translation.

This cutting-edge technology streamlines post-production by minimizing reshoots, shortening production time per hour, and eliminating the need for voice actors to be present in the studio for looping, where actors re-record their lines while watching the original footage, synchronizing their speech with the on-screen lip movements.

Furthermore, it simplifies global post-production operations, as the post-audio department is no longer required to be near the voice actors. Additionally, it reduces the number of dubs needed.

News

Some news publishers have been experimenting with AI tools for some time, such as the Washington Post's Heliograf, which uses natural language generation to write news stories. The Associated Press now uses AI to generate earnings reports, freeing up journalists to focus on more complex stories. Some of the most interesting news applications concern distribution and marketing, such as the Financial Times using AI to help readers find articles related to any highlighted text and making paywalls specific to the content a potential subscriber is trying to access and read.

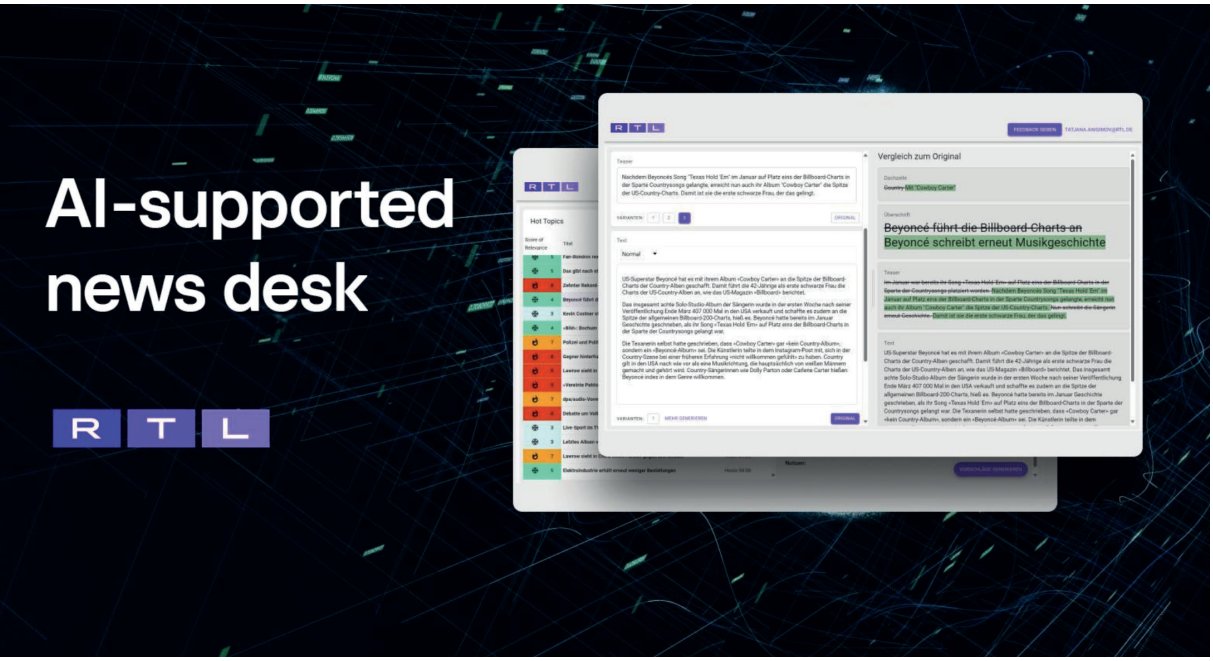


Figure 5: Bertelsmann Case: AI powered Newsroom n-tv.de

RTL Group: AI powered Newsroom n-tv: The newsroom of the future is poised to revolutionize journalism by harnessing the power of GenAI to generate news content in a variety of formats for all media types. This innovative approach employs AI to identify the most compelling stories and customize news formats to suit the audience's preferences.

In a groundbreaking collaboration between RTL and partners, the ntv newsroom of the future leverages cutting-edge algorithms to sift through a multitude of sources and pinpoint the most relevant stories. The AI system then provides additional context, uncovers missing information, and suggests related side stories to enrich the news content.

Furthermore, the AI technology assists in adapting stories to meet the specific requirements of each media channel while maintaining the distinct style of the respective brand. This ensures that the news content is not only engaging and informative but also consistent with the brand's identity.

By using GenAI-driven content generation, the newsroom streamlines the news production process and enhances the overall quality of journalism. This cutting-edge approach paves the way for a more efficient and dynamic newsroom, capable of delivering timely and captivating news stories across various media platforms.

In addition to identifying and tailoring news content, the AI-driven newsroom can also optimize the distribution of stories across different platforms, ensuring that the right content reaches the right audience at the right time. This targeted approach leads to increased engagement, higher viewership, and ultimately, greater success in the competitive news industry.

The newsroom of the future also has the potential to change the way journalists work, freeing them from repetitive tasks and allowing them to focus on more in-depth reporting and analysis. By automating the content generation process, journalists can dedicate more time to investigating complex issues, conducting interviews, and providing unique insights that enrich the news experience for their audience.

In summary, the newsroom of the future, powered by GenAI, promises to transform journalism by streamlining content generation, enhancing the quality of news stories, and optimizing distribution across various media channels. This innovative approach sets the stage for a more efficient, dynamic, and engaging newsroom that caters to the ever-evolving needs of its audience.

2. MUSIC

Adapting IP and new IP Generation:

Gen AI has the potential to enhance creative aspects such as songwriting, music composition, recording, editing, sound design, and post-production.

Universal Music Group has partnered with AI sound wellness company Endel.io to create functional, AI-generated music, repurposing artists' music on their behalf. They have also incorporated the AI music composition platform DAACI into their Abbey Road Studios. Universal Music Group's partnership with social media music creation platform BandLab is aimed at promoting the ethical use of AI and the protection of artist and songwriter rights.

Figure 6 Bertelsmann Case: CRO & Fenster

The inaugural BMG music video, entirely produced by AI, was developed in partnership with Sebastiaan Zimmerhackl, a trailblazer in German AI video production. Zimmerhackl has collaborated with prestigious companies like Adidas, Google, and Universal since 2018.

To craft this innovative music video, they employed the Gen AI feature developed by Stable Diffusion and completed the video using After Effects.

The AI system examined visuals from CRO and 30 images supplied by his girlfriend, Amanda, resulting in the captivating video.

In May this year, Google released MusicLM, which is a text-to-audio tool to generate music, still in its infancy. Google is exploring a partnership with UMG to gain access to music to train the tool, also compensating rights owners for the use of their works.

More recently, Google DeepMind's Lyria, an AI music generation model, has introduced two innovative AI experiments aimed at fostering creativity: Dream Track, a YouTube Shorts experiment created to enhance connections between artists, creators, and fans through music production, and Music AI Tools, a collection of resources developed in collaboration with artists, songwriters, and producers to support and enrich their creative processes.

While there is significant interest in Gen AI for music rights owners, the music industry is still figuring out how to responsibly use Gen AI and also safeguard music rights from unauthorised use.

Audience Engagement (Marketing)

Streaming service Spotify stands out as a leading player here. It acquired Sonantic and its AI DJ function to create custom playlists, to improve engagement and retention. Spotify is also deploying Gen AI to create host-read ads for podcasts, aiding monetisation.

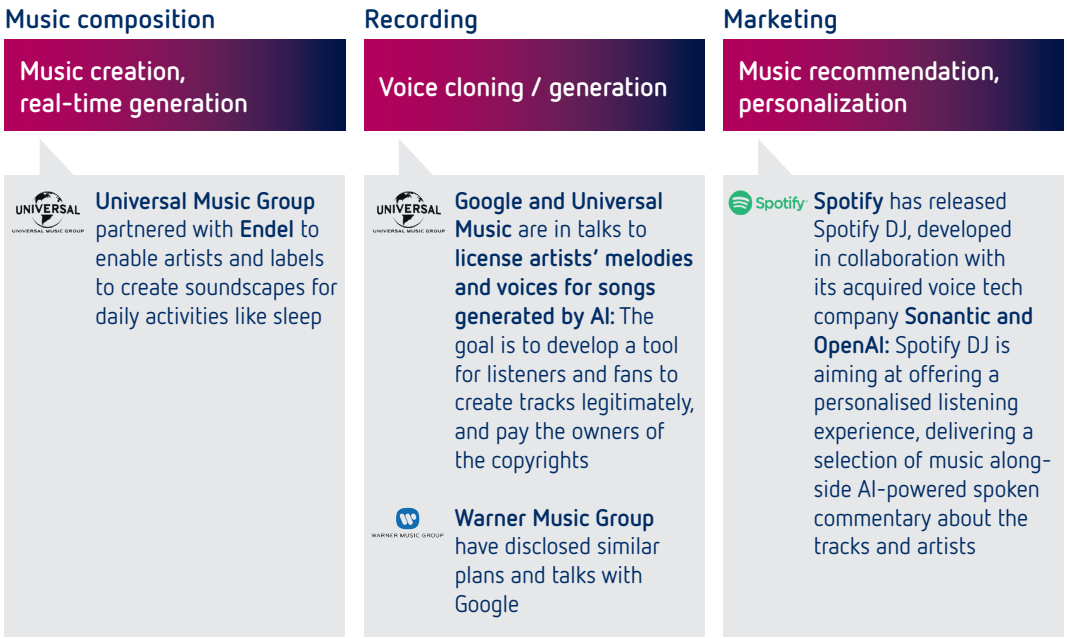


Figure 7: Gen AI and Music | Source: Arthur D. Little

3. PUBLISHING

Across the publishing value chain, Gen AI plays a role in content creation, content editing, and partially in design, layout, sales, and consumption. However, its adoption has so far been slower compared to other industry segments like broadcasting. 2023's Frankfurt Book Fair made clear that there is widespread caution around deploying Gen AI in book publishing, though there was also an acknowledgement that attitudes could quickly change.

Content Creation

Gen AI aids publishers in content creation, particularly in writing assistance, and has promise for emerging areas such as interactive storytelling. Publishers including Hachette, Harper Collins, and Macmillan Education are partnering with technology providers like OpenAI, Jasper, and Google.

Content Editing/Adaptation

Copy editing is a clear candidate for Gen AI efficiencies. Gen AI is increasingly used for content adaptation, such as in the translation process, or turning books into audiobooks using synthetic voice narration.

Sales and Marketing

Emerging use cases include automated sales chatbots and content tagging. Penguin Random House is assessing new forms of marketing copy and design.

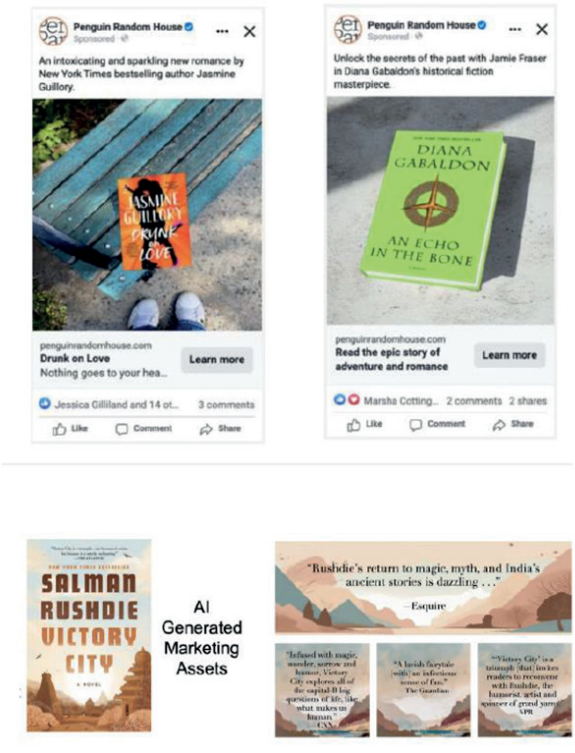


Figure 8: Penguin Random House´s BookBoost

Penguin Random House´s BookBoost: BookBoost is a proprietary platform that leverages first-party data, automation, machine learning, and AI to fully automate the process for Facebook and Instagram advertising. This innovative tool helps to create, execute, and test advertising campaigns at scale with a focus on driving incremental sales and marketing efficiencies. Results to date are very promising, with key metrics on par or above benchmarks with strong performance in driving ad clickers to retail.

A BookBoost campaign starts when an opportunity is identified, for instance through real-time 'buzz' signals or on-sale dates. This triggers the creation of custom audience segments based on various data points including content preferences and purchase behavior and is followed by automated copy and image generation. For copy generation the teams work with an AI platform called Copy.ai. The last part of the automated workflow is campaign set-up, with all elements required for a campaign pushed to the appropriate ad platform.

Before any BookBoost campaign is launched, the Ad Operations team reviews all elements of the campaign and communicates with marketers. Performance data is used to optimize all elements of subsequent BookBoost campaigns, creating a virtuous cycle of improvement, and generating customized content that is highly relevant and appealing to the target audience, encouraging its potential increased engagement with the texts.

Figure 9: Publishing & Gen AI | Source: Arthur D. Little

4. MARKETING

Across the marketing value chain, key players are eager to implement Gen AI to boost efficiencies and enhance creativity.

Content Development, Editing, and Campaign Execution

Generative AI already plays a crucial role in rapidly generating ideas and images, even automating ad creation. Players including Omnicom and WPP are striving to develop and integrate Gen AI solutions into their workflows. Omnicom has partnerships with key technology providers like Microsoft, AWS, and Google, while WPP combines external collaborations with in-house tools, developed in partnership with Nvidia. Agencies are focusing on training custom models internally to safeguard client data.

Lead Generation, Customer Acquisition, and Reach Optimization

Gen AI can be used to target and personalise campaigns. Ads could show custom images or copy depending on context or the target audience and iterate based on effectiveness. Meta, Microsoft, and Google are working to integrate targeted and auto-generated ads into their search functions. WPP is tailoring marketing experiences for different customer segments and efficiently localising ad content.

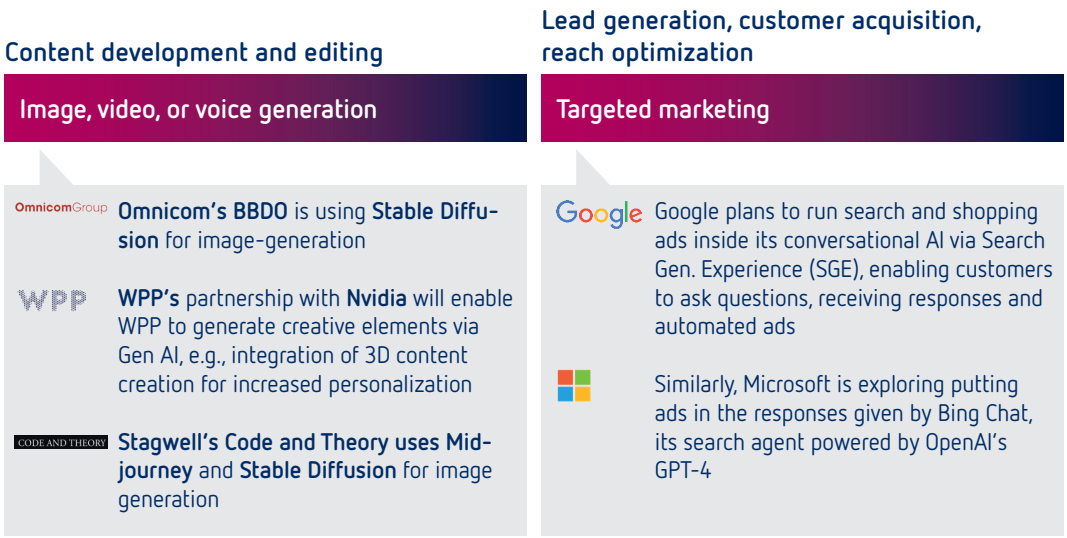


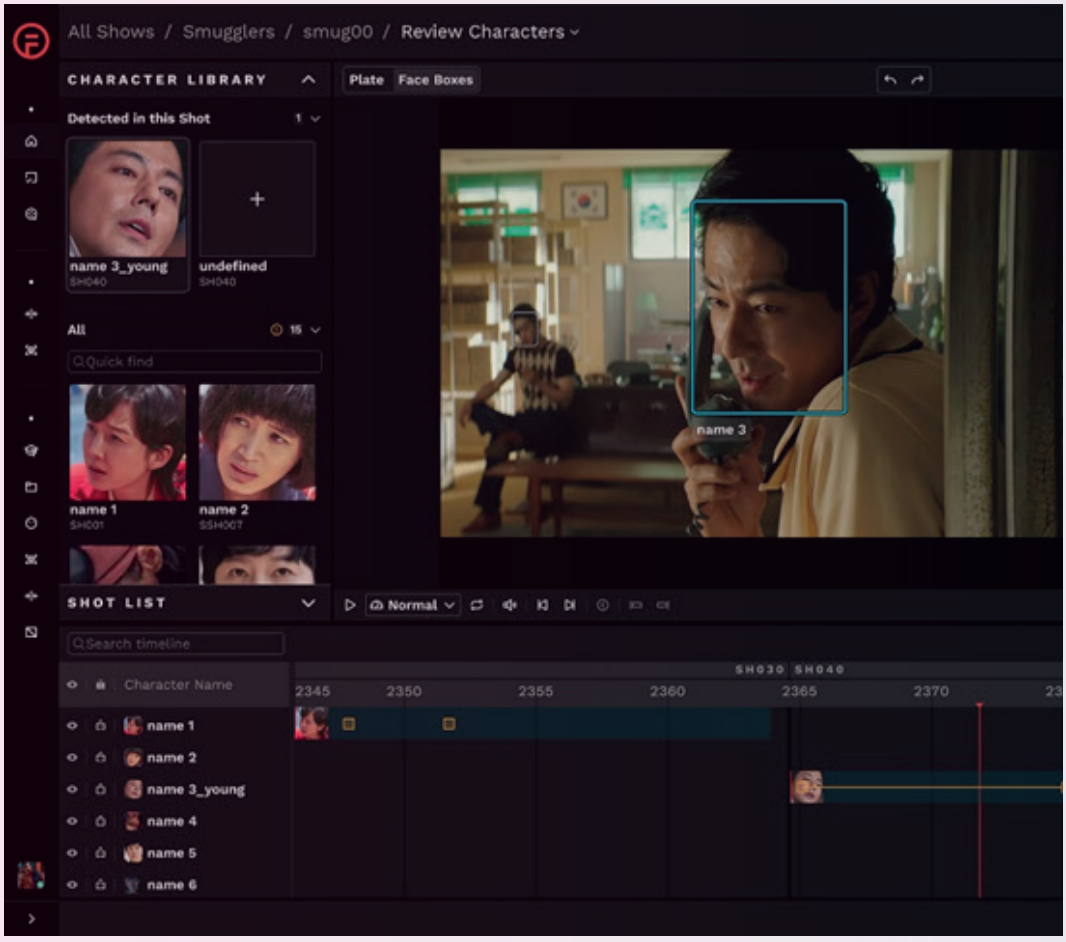
Figure 10: Marketing & Gen AI | Source: Arthur D. Little

CASE STUDY

Revolutionising Media Industries: Stand-Out Example of Innovative Use Case for Gen AI. We are already seeing innovative AI-powered tools and implementations in the media industries.

One example:

// Lip-Syncing Translation and Dubbing: Flawless AI's TrueSync technology is used to edit content and create lip-synced versions of foreign-language films.



Source: Screenshot „Air Head"

Creating video from text

OpenAI's Sora text-to-video tool creates video clips in a range of styles from natural language inputs. Selected creators have been given early access to the tool and have created experimental content. Film producers Shy Kids delivered impressive results in their short, 'Air Head', about a man with a balloon for a head. This combined generated clips with traditional post-production techniques like colour-correction, rotoscoping and sound design, but without the need for extensive CGI or practical effects that the concept would otherwise call for.

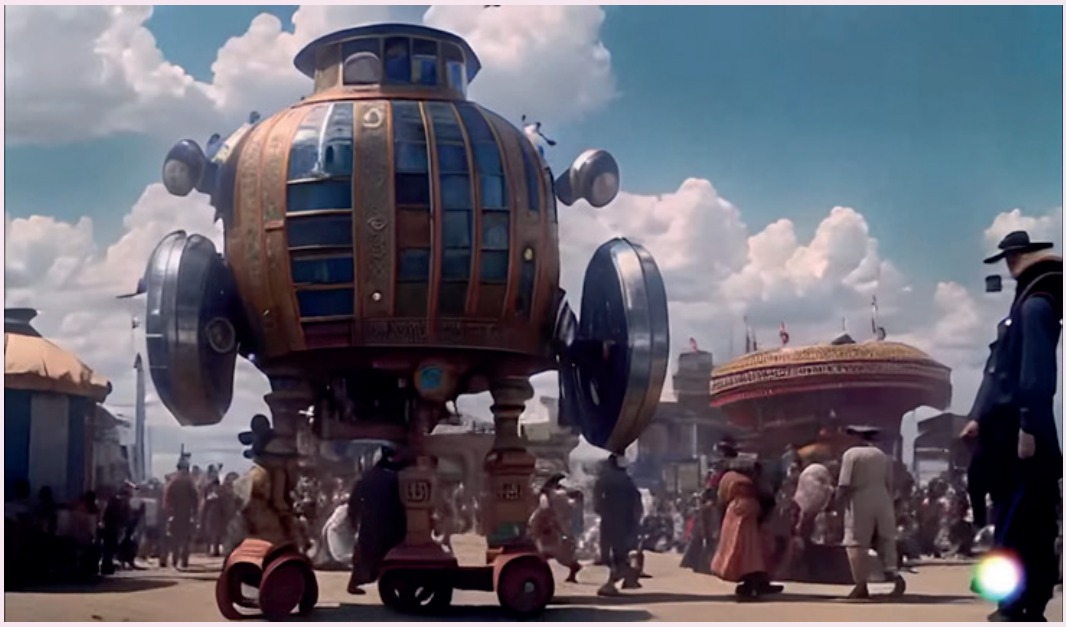
Source: Screenshot Flawless AI TrueSync

Blue Sky Ideas vs. Limits

Beyond the limited integration of Gen AI tools into production, marketing and distribution, we are starting to see bolder, albeit technically still limited, experiments that put Generative AI at the heart of new media products.

“The Carnival of the Ages”

// A fully AI-generated 90-second short, including narration
// Made with DALL-E, Midjourney, Runway, and ElevenLabs
// The filmmaker, Justin Hackney, claims that he “basically did it in 48 hours”



Source: Justin Hackney, YouTube

The newsroom of the future

In contrast to Bertelsmann, which works with long-standing partners such as Google and Microsoft, other media companies have entered into various other partnerships:
// Bloomberg uses NLG technology, Cyborg, to automate financial reporting
// G/O Media is engaging in a Gen AI trial, which will produce stories for the publishers AV Club, Gizmodo, and others
// Channel 1 News is creating a personalised video newscast product
// Ippen Digital Media uses Aleph Alpha for various newsroom tasks such as AI-assisted headlines

Looking ahead, there are even more speculative concepts: whole new kinds of media products, experiences and businesses, enabled by Gen AI. TV, books and marketing could be interactive and personalised. Viewers could have agency over how a series ends, or readers could converse with a character in a book. Music could be composed in real time in response to events in a listener’s day, generating a personal soundtrack to their life. How far off, indeed how successful, these applications are likely to be is uncertain, but the coming years will undoubtedly deliver some kind of breakthrough media application powered by AI.

02

The Technology Side of Things

The Gen AI landscape is rapidly evolving, with numerous models and technology providers aiming to revolutionize creativity, problem-solving, and decision-making. Large Language Models (LLMs) and diffusion models are at the forefront of AI innovation, offering powerful tools for various industries.

Key families of LLMs include GPT (OpenAI), Claude (Anthropic), Cohere Command (Cohere), PaLM and Gemini (Google AI). LLMs with open-source or other non-restrictive licences, such as LlaMA (Meta), GPT-NeoX (EleutherAI), Jurassic-1 Jumbo (AI21 Labs), Megatron-Turing NLG (NVIDIA/Microsoft), and Wu Dao 2.0 (Beijing Academy of Artificial Intelligence), provide accessible options for researchers and developers.

LLMs can perform tasks like text generation, translation, summarization, question answering, and code generation. They can help media companies personalize content, generate insights, and create conversational interactive services.

For video and images, advanced diffusion models and image recognition systems, such as Stable Diffusion (Stability AI), DALL-E (OpenAI), and Midjourney, can analyze and produce visual assets. Proprietary models like Adobe's Firefly and Getty's Gen AI tool (in collaboration with NVIDIA) offer image creation, editing, and advanced filtering capabilities.

Emerging companies with targeted offerings like Persado (personalized marketing copy), Synthesia (video creation platform using generative AI avatars), and Lumen5 (videos from text and images) are also gaining prominence in the media Gen AI space.

Based on ADL's evaluation of current media use cases, the distribution of activity and underlying models was observed across various players, with a notable emphasis on OpenAI, followed by Meta, and Stable Diffusion. (See Figure 11)

Models

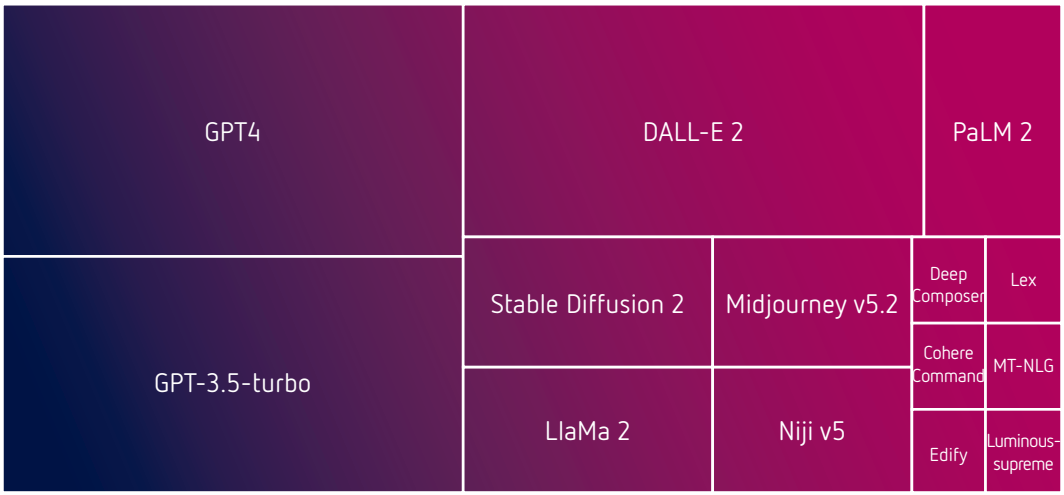


Figure 11: Popularity of LLMs

N=81, 2023 ADL Survey

In summary, Generative AI advancements include:

1) Stable Video Diffusion for high-quality video generation, revolutionizing content creation;
2) 3D scene inference from short videos, impacting TV, film, and gaming;
3) Large-scale multimodal models like Google's Gemini for seamless human-AI interactions;
4) Open-source mixture-of-expert models democratizing AI technology; and
5) Apple's MLX framework enabling smaller LLMs on end-user hardware, integrating AI into everyday devices.

Technology solutions: Major partnerships between big tech & media companies

Major partnerships between big tech and media companies include:

NVIDIA and WPP are developing a generative AI-enabled content engine for digital advertising using NVIDIA Omniverse. This engine connects 3D design, manufacturing, and creative supply chain tools.

NVIDIA and Disney, Netflix, and WarnerMedia: NVIDIA is working with these media companies to develop generative AI technologies for film and TV production, such as generating realistic synthetic crowds, AI-powered video editing, and creating virtual worlds and characters.

OpenAI and media companies: OpenAI is working with the Associated Press, Netflix, and Adobe to develop generative AI technologies for journalism, personalized content recommendations, and content creation tools.

Meta and media companies: Meta is partnering with NBCUniversal, Disney, WarnerMedia, and Sony Music Entertainment to develop AI-powered tools for generating realistic video, creating AR and VR experiences, and personalized marketing.

Google and media companies: Google is partnering with Fox Sports Interactive Media and Typeface to bring Gen AI to sports event broadcasts and develop marketing solutions.

Amazon and media companies: Amazon is partnering with media companies through Amazon Web Services (AWS) and Amazon Studios to develop Gen AI technologies for personalized content recommendations, realistic visual effects, and automating video editing and production.

Microsoft and media companies: Microsoft is working with NBCUniversal Media, Disney, and Warner Bros. Discovery to develop AI tools for news production, content creation, and video game development. Microsoft also offers the Azure OpenAI Service for media companies to develop their own Gen AI applications.

03

Outlook & Exploring the Debates and Challenges Surrounding Gen AI

The rapid advancement of GenAI has opened new possibilities for media companies, offering innovative ways to create and distribute content.

The adoption of Gen AI across various media sectors has been progressing at different rates, reflecting the unique challenges and opportunities within each industry segment. In the music sector, AI is making strides in areas such as composition, production, and marketing, with major players like Spotify, Apple, and Google actively integrating AI-driven solutions. In contrast, the film and television industries have been slower to adopt AI, as the industry paused to consider the role of AI in the creative processes during the writers and actors strikes of 2023, and instead primarily focusing on enhancing content recommendation algorithms and automating certain aspects of production and post-production including localisation, lip-synching and background effects. Meanwhile, the publishing sector has seen AI adoption in areas like automated content generation for marketing and personalised recommendations, but the technology's impact on the creative process remains limited. The advertising industry has embraced AI more rapidly, leveraging its capabilities for targeted marketing, ad personalization, and performance analysis. Overall, the rate of Gen AI adoption across media sectors is influenced by the specific needs, challenges, and opportunities within each industry, as well as the readiness of stakeholders to embrace and invest in AI-driven solutions.

As Gen AI becomes increasingly integrated into the media landscape, it is essential for organisations to address the challenges and opportunities that come with this technology.

In this discussion, we raise five considerations later on that media companies should consider as they navigate the complex world of AI integration, touching on topics such as ethical standards, risk mitigation, compliance with international guidelines, governance policies, transparency, and the balance between efficiency and efficacy.

Outlook: Gen AI's Impact on Media & Creative Industries

The future of generative AI is incredibly promising, with rapid advancements in both closed and open-source domains transforming industries like entertainment, advertising, and content creation. Key developments include:

Remarkable progress in video generation: Techniques like Stable Video Diffusion have made it possible to generate high-quality videos from single images. This advancement will revolutionize content creation, advertising, and entertainment industries by reducing the time and resources required to produce visually stunning videos.

Significant advancements in 3D generation: The ability to infer full 3D scenes from short video sequences will have a massive impact on TV, film, and gaming industries. This technology will enable creators to develop immersive and realistic environments with less effort, leading to more engaging and visually appealing content.

Large-scale multimodal models: With tech giants like Google entering the arena with their Gemini models, we can expect more sophisticated and powerful AI models that can understand and generate content across different modalities, such as text, images, and audio. This will lead to more seamless and natural interactions between humans and AI systems, enhancing user experiences in various applications, including virtual assistants, content recommendation, and personalized marketing.

Open-source mixture-of-expert models: The introduction of models like Mixtral MoE 8x7B signifies that smaller-scale models will become more powerful and accessible. This will democratize AI technology, allowing more developers and researchers to experiment with and build upon these models, leading to further advancements in the field and fostering innovation in various industries.

Apple's entry with MLX framework: Apple's release of the MLX framework indicates that smaller Language Models (LLMs) will likely run on end-user hardware. This development will make AI more accessible and integrated into everyday devices, enhancing user experiences and enabling new applications, such as real-time language translation, smart home automation, and personalized content curation.

Emerging regulatory framework: With the European Union's AI Act, the world's first comprehensive law to regulate AI is currently inching towards the finish line of the complex legislative process.

The final draft text, leaked in January 2024, has led to mixed reactions. While the tech community views the regulation foremost as a bureaucratic obstacle for Europe's AI ecosystem, the creative- and media industries are generally in favour of the compromise – not least because the bill now encompasses transparency obligations for providers of general-purpose AI and requires them to comply with applicable copyright law.

Even if the different parts of the AI Act will become applicable (in phases) only from 2025 onwards, companies may already start to familiarize themselves with the new provisions in good time – both to ensure compliance and to take advantage of the opportunities arising from the regulation. Furthermore, companies should also keep a close eye on the various upcoming regulatory developments in other parts of the world, particularly in North America, China and India.

Final thoughts and key questions

Gen AI is already influencing media and creative industries, with AI-assisted software, ad copy, VFX, book covers, and news articles in the market. However, the full implications will take time to unfold, as business models and value chains transform gradually, and societal factors mediate the impact of technology.

The most significant impact of Gen AI will be in simplifying complex, skilled processes for a broader audience, particularly in areas where outputs can be immediately verified. Media companies should focus on applications that empower creatives to produce more, higher-quality work, rather than replacing them with AI-generated content.

AI tools are not yet suitable for wholly replacing human-made content, and media companies should maintain strong relationships with creators and understand the creative process and market for media products. Gen AI systems are less suitable for tasks requiring precision, vital system dependencies, or where output appropriateness is not immediately evident. Traditional software approaches, human input, or a combination of both will often be the most appropriate solution as we move beyond the stage where every problem appears to be a nail for our Gen AI hammers.

Any media company looking to harness the power of Gen AI must maintain a focus on several critical areas:

1) How to operationalise (and balance quality with efficiency)
2) How to ensure quality and how to mitigate reputational and legal risks
3) How to align and comply with global regulations, emerging standards and transparency
4) How to govern AI use
5) How to capture future opportunities and full innovation potential, balancing all of the above.

As the outlook for generative AI continues to evolve, industries must adapt and embrace these technologies while considering the potential regulatory challenges and ethical implications. By doing so, they can harness the power of AI to drive innovation, enhance user experiences, and create a more connected and immersive world.

BERTELSMANN

Bertelsmann is a media, services and education company with more than 80,000 employees, that operates in about 50 countries around the world. It includes the entertainment group RTL Group, the trade book publisher Penguin Random House, the music company BMG, the service provider Arvato Group, Bertelsmann Marketing Services, the Bertelsmann Education Group and Bertelsmann Investments, an international network of funds. The company generated revenues of €20.2 billion in the 2023 financial year. Bertelsmann stands for creativity and entrepreneurship. This combination promotes first-class media content and innovative service solutions that inspire customers around the world. Bertelsmann aspires to achieve climate neutrality by 2030.

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