

AI in Publishing: 2024 Update

Presentation to EDItEUR International Supply Chain Seminar

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Introduction

- Independent consultant, NED and doctoral researcher
- 27 years experience in the book business, across bookselling, publishing, consulting
- Digital transformation experience at Hachette
- Worked with IPG to develop first independently accredited, publishing specific training on Generative AI and publishing
- 250+ publishers in 10+ countries: Big 5, independent trade publishers, university presses, specialists
- Aggregate perspective on how AI is, and could be, used

Key Themes

- Technological development
- Accuracy and provenance
- Legal challenges and increased licensing activity
- Environmental impact
- Workplace impact
- Conclusions

Pace of Development and Integration

- New models: ChatGPT 4o, o-1 Preview, Claude (Haiku, Sonnet, Opus), Copilot (voice and vision), Gemini, NotebookLM, Llama 3, Mistral, Apple Intelligence...
- Significant improvement in performance benchmarks (Stanford IHCAI)
- Trends: application and operating system integration, multimodality, scale
- Capability overhang: absent any further development, 5-10 years to understand the systems we have today (Ethan Mollick)
- Rising cost of training compute: order of magnitude increase with each generation, \$10 > \$100 > \$1,000
- Calls for greater regulation and some models not available in key markets (Llama 3, EU; Apple Intelligence, EU and China)

Accuracy and Provenance

- Probabilistic nature of models and non-exhaustive training data mean hallucination is inevitable, but risks can be mitigated, e.g. RAG
- Bias to high resource languages in training data
- Types of error: large and obvious versus subtle—latter may be more dangerous
- Identifying AI-generated content easier in other media formats (audio, images, video) compared to text
- Lack of standards for disclosure

Copyright, Legal Challenges and Licensing

- No doubt copyright material has been used for training without prior authorization—but is this unlawful?
- Ongoing and new litigation from copyright holders against AI companies (Anthropic, Meta, Nvidia in recent months)
- Fair Use arguments in US—Google Books as guideline? How will courts see this outside America?
- Increased tempo of licensing agreements—at least those being announced—but pushback from authors and creatives even where it brings new revenue (Taylor & Francis, Sage)
- Unpacking licensing strategy

Environmental Impact

- Greater awareness of environmental impact of AI, recent media on resource usage, recommissioning of Three Mile Island nuclear power plant for Microsoft data centre
- Sam Altman: future tech development depends on energy breakthrough, fusion investment
- Should sustainability-minded publishers resile from AI?
- Exact impact is contested: e.g. Informa, 550% increase in compute = 6% increase in resource consumption
- Hard for publishers as end users to assess own impact
- But that's also true for most Scope 3 emissions: any economic activity requires judgement on impact and trade-offs

Workplace Impact

- Concern from many publishers, authors, creatives re impact of AI on livelihood
- So far, main impact has been incremental improvement in productivity, particularly around automation, ideation and content creation (largely ancillary content, marketing material, metadata)
- Some publishers integrating AI with core product (Pearson, Burleigh Dodds Science)
- Levels of AI Usage
 - Level 1: taking a single task or process and replacing/augmenting with LLM outputs
 - Level 2: using an existing COTS tool/service to accomplish particular task
 - Level 3: integration of AI into existing corporate system or core content
- Human-in-the-loop remains critical