Introduction to Al in Publishing

Presentation to EvenUP, 5 November 2024

George Walkley
Outside Context Ltd

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 Al is, and could be, used

Key Themes

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

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...
- Specialist academic tools: Elicit, Scite, Consensus
- Significant improvement in performance benchmarks (Stanford IHAI)
- Rising cost of training compute: order of magnitude increase with each generation, \$10 > \$100 > \$1,000
- Trends: multimodality, application and operating system integration, search, generative vs agentic Al
- Capability overhang: absent any further development, 5-10 years to understand the systems we have today (Ethan Mollick)
- Calls for greater regulation and some models not available in key markets (Llama 3, EU; Apple Intelligence, EU and China)

Quality Issues

- Increasing speed and quality of results, but probabilistic nature of models and nonexhaustive training data mean hallucination is inevitable
- Bias to high resource languages in training data
- Types of error: large and obvious versus subtle—latter may be more dangerous
- Identifying Al-generated content easier in other media formats (audio, images, video) compared to text
- Questions around disclosure, citation and replicability
- Errors can be mitigated (good prompting, RAG, secondary verification)

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

Stakeholder Concerns

- Publishers have to address range of opinion from stakeholders
- Concern from many publishers, authors, translators, illustrators, other creatives re use of AI for training and impact on livelihood
- Some reputational issues for publishers seen to be using AI (Bloomsbury, Macmillan, PRH, Watkins) and some authors demanding opt-outs
- Others enthusiastically using Al
- Academic publishing: institutional policies
- Consultative approach (CUPA) vs speed (Wiley)
- Need for author commitments to be realistic

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 Al?
- 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

- So far, main impact has been incremental improvement in productivity, particularly around automation, ideation and content creation (largely ancillary content, marketing material, metadata)
- Some use of AI translation (Springer, VBK)
- Some publishers integrating Al with core product (Pearson, BDS)
- Levels of Al Usage
 - —Level 1: taking a single task or process and replacing/augmenting with LLM outputs
 - —Level 2: using an existing COTS service to accomplish particular task
 - —Level 3: integration of AI into existing corporate system or core content
- Human-in-the-loop remains critical

Any Questions?

hello@outsidecontext.co.uk

www.georgewalkley.com/newsletter