



Interview with Martin Delahunty

**For podcast release
Monday, June 19, 2023**

KENNEALLY: Even with a \$10 billion investment from Microsoft and 45 gigabytes of training data, the engineers at OpenAI, who developed ChatGPT, still rely on human curation for ensuring the necessary confidence in the narratives that their remarkable machine gives to all comers and all questions.

Welcome to CCC's podcast series. I'm Christopher Kenneally for Velocity of Content.

Long before ChatGPT arrived on the hype cycle, Martin Delahunty was considering what AI technology could mean for scholarly publishing, how it might change processes developed over centuries, and how publishers should react. In his work with universities, science research organizations, and open science publishing, Delahunty has identified critical issues of immediate concern with AI, and he has called for swift responses by human curators. The founder of Inspiring STEM Consulting, Martin Delahunty joins me now from London. Welcome back to Velocity of Content, Martin.

DELAHUNTY: Thank you, Chris. It's very good to be back with you.

KENNEALLY: Well, we are looking forward to this discussion. It's a timely one. It's a subject we will be covering a good deal in the months ahead on Velocity of Content, and that is about the role of AI in publishing of all kinds. In 2019 in an article for the European Medical Writers Association journal, you asked, will medical writers be replaced by robots? That was a long time back in robot years, at least. What was your answer then, and have you changed your mind over the last four years?

DELAHUNTY: Yes, that was a prescient article at the time. And after some deliberation, Chris, the answer was no. Four years on, I think my opinion still hasn't changed. However, the challenges with regard to AI-powered technologies are now much more apparent. I think what we're seeing is a growing consensus amongst those creating and using AI – is that it just remains a tool. It still requires human expertise and skilled use. But the warning I would give is that AI may not replace you, but a person who uses and is skilled in using AI could.

KENNEALLY: That really is the challenge, isn't it – to try to keep up with the change. There's a lot of change going on. And everyone's talking about ChatGPT. It's the most famous or



infamous of all AI technologies. How do you think these sophisticated chatbots, like ChatGPT, change the AI calculus for publishers?

DELAHUNTY: Interesting question. Yes, I think we are at the beginning of a rapidly escalating roller coaster with lots of excitement and lots of trepidation. But I think right now, rather than the benefits of AI, there's significantly more discussion and evaluation of the risks, both real and perceived. I think that's natural when confronted with a new unknown technology that you consider the threats to the status quo whilst we get to grips with understanding just how they work. That's very much true for academic publishing.

And I think in academic publishing, a major concern is the amplification of existing fraudulent practices, such as paper mills and fake papers. But I'm also seeing publishers developing more clarity on what we define as AI and what sits under the umbrella of AI. You can break it down probably into four focal areas for publishers. That's big data processing – so we know that big data, particularly with open access publishing, is a major challenge – reasoning around data, problem-solving, and learning.

I think it's also maybe surprising to many people that ChatGPT still requires human curation and sense-checking. I imagine a bit like the Wizard of Oz on the yellow brick road – we find the wizard, and then we pull back the curtain, and then we find that it's a wizened old man, powerless, pretending to be something that he isn't. I think there's a manual process behind it. There's also a bias being introduced into the process which is interesting.

KENNEALLY: Well, Martin Delahunty, you make the choice that there has been a stress on the challenges, the problems, associated with the chatbots, but there's also opportunities here. Every technology has potential for abuse and for driving progress. So can you weigh up for us the pros and cons of generative AI for academic research?

DELAHUNTY: Yes. I think on the positive side, just the advent of these AI tools and the prominence and infamy of these tools is that it's just heightened awareness of publishing practices and ethics, and I think that's a really healthy thing. For example, the Committee on Publication Ethics, a longstanding advocate for ethical publishing practices, has quickly moved to develop a position statement reiterating that large language models like ChatGPT do not meet authorship requirements. And the reaction from publications such as *Nature* and *Science* has been equally swift. The editors for these journals have stated that ChatGPT and the like cannot meet the standard for authorship. So it has been very positive, if you like, in bringing commercial publishers together collectively to react to what is seen as the initial perception of threat. And I think, again, with new technologies, this reaction is normal.



But I think publishers will benefit broadly in three ways from these AI tools. For example, for journal editorial offices, it has the potential to automate repetitive and tedious tasks – managing large submission volumes, increasing process efficiency, developing more efficient peer review processes. We know that peer review is critical to the scholarly and academic publishing endeavor, yet it is a human intervention, and it requires a large resource that is just difficult to acquire – consistently difficult to acquire. So I think it will help there.

It can also help in directing authors in submitting to journals that are most relevant in scope for their work, determining if the subject falls within the correct aims and scope of the journal. It can also help in suggesting reviewers, assessing language quality, detecting plagiarism and duplicate submissions.

And thirdly, it may move towards – again, looking at the peer review process – being able to reason and assess the novelty of a scientific research study whilst also checking for ethical compliance, copyright issues, and image duplication, which has been a consistent challenge throughout for academic publishers.

KENNEALLY: Martin Delahunty, you're keeping an eye out on some of the innovative products that are becoming available for scholarly publishers. Tell us about a few that stand out for you.

DELAHUNTY: Chris, it's really hard to keep up, because almost every week, there's an announcement about a new product. But there are some really interesting, innovative products that are already being tested within the scholarly publishing sector.

One which we picked out there, Scholarcy, is an online article summarizer tool. It reads your research articles, reports, and book chapters in seconds and helps to break them down into bite-sized sections. The objective is to allow the reader to quickly assess how important a particular document is to your work.

Another – again, I mentioned the challenge around image fraud and manipulation of images. It's a longstanding challenge for academic and scientific journals. And Proofig is a product that is addressing this. This product estimates that there are 2.5 million scientific manuscripts published each year, of which 20-35% of those articles have a risk of retraction after publication due to image duplication, manipulation, or some form of visual plagiarism. So Proofig is an AI tool dedicated to screening these scientific images – gel blots, X-rays, etc.



KENNEALLY: Martin Delahunty, what steps should publishers take right now to address some of the concerns and questions that generative AI raises? You mentioned education for authors. That would probably be one important place to emphasize.

DELAHUNTY: Exactly, Chris. Education is everything here, where there's so many unknowns. But as I mentioned, *Nature*, *Science*, and other publishers moved very quickly to update their authorship guidelines so to state again clearly that ChatGPT cannot be an author, but also to tighten up their ethical policies. So any publishers that have not moved on those fronts, I would advise considering updating your authorship guidelines and ethical policies to address ChatGPT and related AI tools.

And as you say, education of internal editorial teams on use of these tools and also the potential use by authors of these tools, so they can gain an awareness of the potential use and misuse of these tools. And very definitely explore relevant tools to see whether they can increase the economy, efficiency, and effectiveness of publication processes to benefit authors, reviewers, and editors. Finally, we are seeing – very nicely in this highly competitive commercial environment that we know of within publishing – but we're seeing lots of participation in cross-publisher initiatives to try and define best practices and policies around use of these AI technologies. That is a very positive move.

KENNEALLY: Martin, you're a fan, as am I, of *The Hitchhiker's Guide to the Galaxy*. Writing in the late 1970s, author Douglas Adams imagined the electronic book, and he pretty much got it right. Along the way, Adams also had a lot to say about our interactions with technology. So let's play dueling quotations. Here's a favorite of mine. "We are stuck with technology, when what we really want is just stuff that works." How does that sound to you, and what quote from Adams do you want to share?

DELAHUNTY: That's a great quote, Chris. My dueling quote to you would be when Arthur Dent asks Ford Prefect what is *The Hitchhiker's Guide to the Galaxy*, and he explains to him that it's a sort of electronic book. It tells you everything you need to know about anything. That's its job. And I see ChatGPT and generative tools just like that. At the same time, it sounds scary. But as it states on the cover of *The Hitchhiker's Guide*, I would simply say to all, don't panic.

KENNEALLY: Well, with that advice, Martin Delahunty, I want to thank you for joining me today on Velocity of Content.

DELAHUNTY: Thank you very much, Chris, for inviting me.

KENNEALLY: That's all for now. Our producer is Jeremy Brieske of Burst Marketing. You can subscribe to the program wherever you go for podcasts, and please do follow us on



Twitter and on Facebook. You can also find Velocity of Content on YouTube as part of the CCC channel. I'm Christopher Kenneally. Thanks for listening.

END OF FILE