

Some answers may have been edited/condensed for clarity.

Paper/Printing

Do you have any data on publishers who have moved work away from China and back to the States or Europe?

Bill: We don't have any such data, but we do have publisher customers who have moved work back from China to North America permanently. However, we also have publisher customers who, during the tight market through COVID, swore they would never bring their work back to China, but already have.

What are the actual challenges of the paper industry on a global scale, how to use the paper without affecting the environment?

Bill: The greatest challenge to the paper industry is falling demand. Environmentally the industry continues to be hamstrung by the misperception that it is responsible for deforestation. Illegal logging is still a global issue, but it almost always occurs in countries without robust laws and effective enforcement. Within the past decade, 85% of illegal wood came from three producer countries. Approximately 50% of illegal wood originated in Indonesia, 25% in Brazil, and 10% in Malaysia. The US, Canada, and Europe have virtually none of these issues. Furthermore, because the US is a major consumer, we have enacted laws to combat the usage of such illegal fiber. The Lacey Act is a United States conservation law that makes it illegal to acquire, transport, sell, purchase, export, or import any fish, wildlife, or plant species that are taken or traded in violation of US or foreign law. The 2008 amendment to this law, which broadened the definition to include plants and plant products, has helped to reduce imports of illegally harvested wood into the United States.

Quantitatively, there's no arguing that paper manufacturing is carbon intensive (primarily because it requires so much energy), and it's in measuring and mitigating this impact that the collective industry balances great risk and opportunity.

What is the percentage of paper with ECO certifications such as FSC that is being used?

Bill: There is no clear data that measures how much paper (printing and writing paper and/or paper board used in packaging) carries some sort of "eco" or fiber certification (FSC, SFI, CSA, PEFC).



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We do know, as is the case with recycled fiber (see question below), there is a finite amount of fiber from certified forests available. Worldwide only about 10-11% of forests are certified to a credible third-party system. Most of these certified forests are located in industrialized nations like the United States, Canada, Sweden, Finland, and Russia. In the United States 13% of forests and 20% of timberlands are certified. In large part, this is a result of who owns these forests. Collectively, 10.6 million private owners control 58% of forests and supply more than 90% of the fiber that enters US supply chains. Of this group of private owners, 92% are categorized as family forest owners, who in turn, own 38% of US forests. Getting these private, family forest owners to certify their forests is challenging. This is due to the sheer number of owners, the relatively high costs of forest certification on small parcels, small average parcel sizes, infrequent and/or the small size of harvests, long-term commitments associated with certification, and varying ownership priorities. Together these dynamics create a large mismatch between the demand for – and supply of – fiber from certified forests. This is distinctly a US dynamic, as in Europe, for example, most forests are owned by the government, and therefore much easier to certify.

FSC guidelines seem to be well established. How/when will guidelines markers for carbon information be in a similar state?

Bill: This is a great question, and one that is developing – albeit slowly. Europe's new carbon taxing scheme is pressing industry to measure carbon impact – including paper and printing. To date, however, there is still not an established, accepted input standard. The prospect/promise of direct financial repercussion for carbon emissions is already motivating industry change (i.e., Amazon's locally sourced European book policy) and we expect the pace of development to accelerate.

What did Jim mean about risk with using recycled paper?

Bill: Recycled fiber refers to fiber that was collected and converted back into a fiber feedstock that can be used in another product. Fiber from recycled feedstocks do not pose a major threat to forest ecosystems or nearby communities and peoples, and incorporating recycled content into paper and packaging is one way to keep fiber in use longer, out of landfills, and promote a circular economy. However, with all its important characteristics, recycled fiber is still a finite resource. Fiber can only be recycled about 5–7 times. This is due to collection rates and process losses, where as much as 80% of the fiber can be lost after two rounds of collection and



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processing. These process losses mean that in North America, even if all the recoverable fiber is collected and processed - without new fiber inputs - most recycled paper products would run out of material in less than one year. So, while using recycled fiber in paper and packaging is undoubtedly beneficial, new fiber is always required. It is not a question of recycled versus new fiber, but rather what is the best use of these two interdependent feedstocks.

Can the digital print systems use more sustainable paper? LSI really struggles with this, however, Rapido in Canada doesn't.

Bill: Assuming the question is addressing recycled paper when asking about "sustainable paper," the answer is "yes, but." Recycled paper is available and suitable for digital print systems, but because of occasional contamination, weakened fiber strength, and optic degradation; large print platforms are sometimes reluctant to embrace recycled digital papers because of reduced throughput. Adoption of recycled digital paper for book application will therefore likely remain niche.

It should be noted, however, that the sustainability story of paper is much broader than just how much recycled fiber it contains. Fiber certification and carbon impact are two other significant considerations when defining the sustainability profile of a specific paper.

How can we maximize sustainability with eco-friendly products?

Bill: Education is the first step. <u>TwoSides North America</u> is a great place to start.

The general public and most new authors still think we should be printing large runs and storing. I agree POD is really the Earth Friendly way to go, but it seems to still have a stigma of being a cheap way that indies do it! How can we fight this outlook?

Bill: Yes, but the truth will set us free! The stigma is flat out incorrect. POD/digital quality has improved so much within the past decade that many professionals (let alone average consumers) can't tell the difference from offset printing – even with a loupe. Add the often overlooked financial and environmental cost of obsolescence, the new model is the truly sustainable one. Over-producing because of fear-of-lost-sale is the same as setting hope as a principal business strategy. "The way it's always been done" is among the biggest threats to



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publishing, and POD/digital solutions are the New Frontier. Thriving in the new world order will ultimately swing perception.

AI and Production

How can AI be used in the production side of the bookmaking process? As a fiction and fantasy publisher, we are curious how other publishers are navigating the use of AI in text production and editorial.

Marina: There are tools out there now that can help with comparative proofreading, coding, and the like—all tedious, time-sucking tasks, so we are definitely looking into these, especially those that are used locally rather than online. One must take care especially with external/web-based apps, as security is always a concern—it is still the wild west out there with AI.

As far as text or image creation, it is important to note here that, currently, any written or visual content that is generated by AI is not subject to copyright, so this material would technically be unprotected.

Diem: Our CIO has been collecting potential use cases/user stories for AI from across our publishing divisions (Books, HFS, Journals, and Project Muse) which touch upon accessibility, discoverability, efficiencies, and enhancements or new opportunities. In the Books division we have been meeting with a variety of groups and vendors and have run a few modest tests using open access content. Areas that we have looked into include generating abstracts, indexes, key words, marketing copy, and summaries. Areas that I'm interested in looking into in the future are the types of activities we don't currently do ourselves, such as audio and translations. Again, we are in an exploratory mode because the available tools we might have access to aren't quite workflow ready and there are a multitude of issues that need to be sorted such as bias, data security, and rights. But ultimately, I think that anything repetitive and rules-based where we can write up standard guidelines and operating procedures could potentially incorporate some measure of AI. That's a lot of what goes on in production---not all, but a lot of activities.



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With respect to fiction publishing, we heard from one of our partners that they've been testing out generating manuscript summaries specifically for fiction to help with slogging through the slush pile.

Are you creating policies around AI use?

Marina: We are navigating the use of Generative AI tools with a great deal of caution. Given the legal ramifications and security concerns, our company already has a policy in place. We are prohibited from sharing any company sensitive data or confidential materials with online Generative AI Tools. This includes, but is not limited to, financial reports, strategic plans, intellectual property, customer data, copyrighted matter in the company's possession, and any other information that could cause damage to the integrity and reputation of the company if disclosed.

Many book contracts now contain a clause prohibiting the use of AI, so this is something new we are navigating as well.

Diem: JHUP issued a "<u>Generative AI Policy for Authors</u>" over the summer which can be found on the author information area of our website. Internally we have formed an AI working group, headed by our CIO. There are members from across the different areas of all 4 Hopkins divisions (Books, HFS, Journals, and Project Muse). Staff are encouraged to learn more about AI, share information, and try out the various tools available to get a better understanding of what they are and what they might be able to do. However, outside official tests that we're running with open access content, staff have a clear understanding that actual JHUP content and data is not to be used.

With respect to book contracts, we have been getting requests to include a clause prohibiting the use of AI. The issue with something like that is it presumes that AI is something new that is not already in use. Even if publishers are not actively using the new AI tools, our vendors and partners have most likely been using AI tools all along.