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BUSINESS

A Napster moment for ivory towers

Can a Californian start-up disrupt academic publishing in the same way streaming upset music, asks *Danny Fortson* in San Francisco

Richard Price likes to run a hand through his sandy brown hair, leaving half of it shooting off at jaunty angles. The 38-year-old is a philosopher — Oxford-educated, softly-spoken and earnest. Sitting in a conference room in San Francisco, fitted out like a library, he is discussing not life's deepest existential questions, but something more prosaic: business. Specifically, academic publishing, a multibillion-pound industry controlled by a handful of players, led by Elsevier. "Some people call it a racket," Price said, and it's a racket that hasn't changed "for hundreds of years".

Publishers charge swingeing fees for access to specialised journals filled with research that is usually publicly funded. Briton Price, once a fellow of All Souls College, Oxford, the city where he ran a banana cake delivery service, thinks that is wrong. More to the point, he thinks it is a business opportunity.

The system, as it stands, is impeding science, he argues, and thus human progress. He wants to tear down the whole edifice and offer it all — every piece of research ever published — free through his start-up, Academia.edu.

He is up against some very powerful forces. Elsevier, based in Amsterdam, is the world's biggest publisher of academic research. It is a subsidiary of the £34bn FTSE 100 giant Relx, whose shares have nearly doubled in five years to £17.20 as it kept a grip on the last corner of publishing virtually untouched by the internet.

It is an extraordinary business. Scientific research is typically funded by foundations or taxpayers. Academics provide the articles free. Peer review is also gratis.

Elsevier, which owns more than 2,500 academic titles from The Lancet to Cell, packages this research into journals and charges for access — either via multimillion-pound "bundle" deals with university libraries, or one-off fees of up to £25 for a single article. It is a profit machine. Elsevier's 37% margins compare favourably with those of Facebook, which also traffics in free content.

Price reckons he is about to do what Spotify did to the music business. He said: "With the internet, there's an opportunity for rebuilding the whole system for academic research from the ground up. A totally different system — one that doesn't have paywalls."

Academia.edu allows academics to upload research, which is then freely available to anyone online. Rather than appearing in a quarterly magazine, pieces pop up in a Facebook-style newsfeed app, where readers can rank them based on scientific rigour or significance.

More than 72m people have signed up for free access. Academia makes a profit thanks to a core of 107,000 subscribers who pay $100 (£78) a year for premium services. The few subsidise the many.

Price's creation, which is backed by Tencent, the Chinese tech conglomerate — as well as angel investors such as lastminute.com co-founder Brent Hoberman — is striking a chord. Some of Elsevier's biggest customers are rebelling. The University of California, whose 10 campuses include Berkeley and UCLA, is the latest to dig its heels in. The California universities, which together are America's largest producer of academic papers, let a January 31 deadline pass without agreement on an access deal after the previous five-year contract expired in December. The two sides are "not very close" to a resolution, according to Jeffrey MacKie-Mason, Berkeley's head librarian.

For such a large organisation, losing access to new papers in Elsevier's journals would be a blow. However, MacKie-Mason said: "Elsevier charges more than the value we're receiving," he said. "Some of us are thinking we may be in our 'Napster moment' where the industry is radically transformed because of what's now possible with digital communications."

Last year, some 300 universities in Germany and Sweden took a similar stand, as did institutions in Hungary in December. In September, national funding agencies from 11 countries, including UK Research and Innovation, launched Coalition S, a radical initiative that sets 2020 as the deadline by which any work they fund must be published freely.

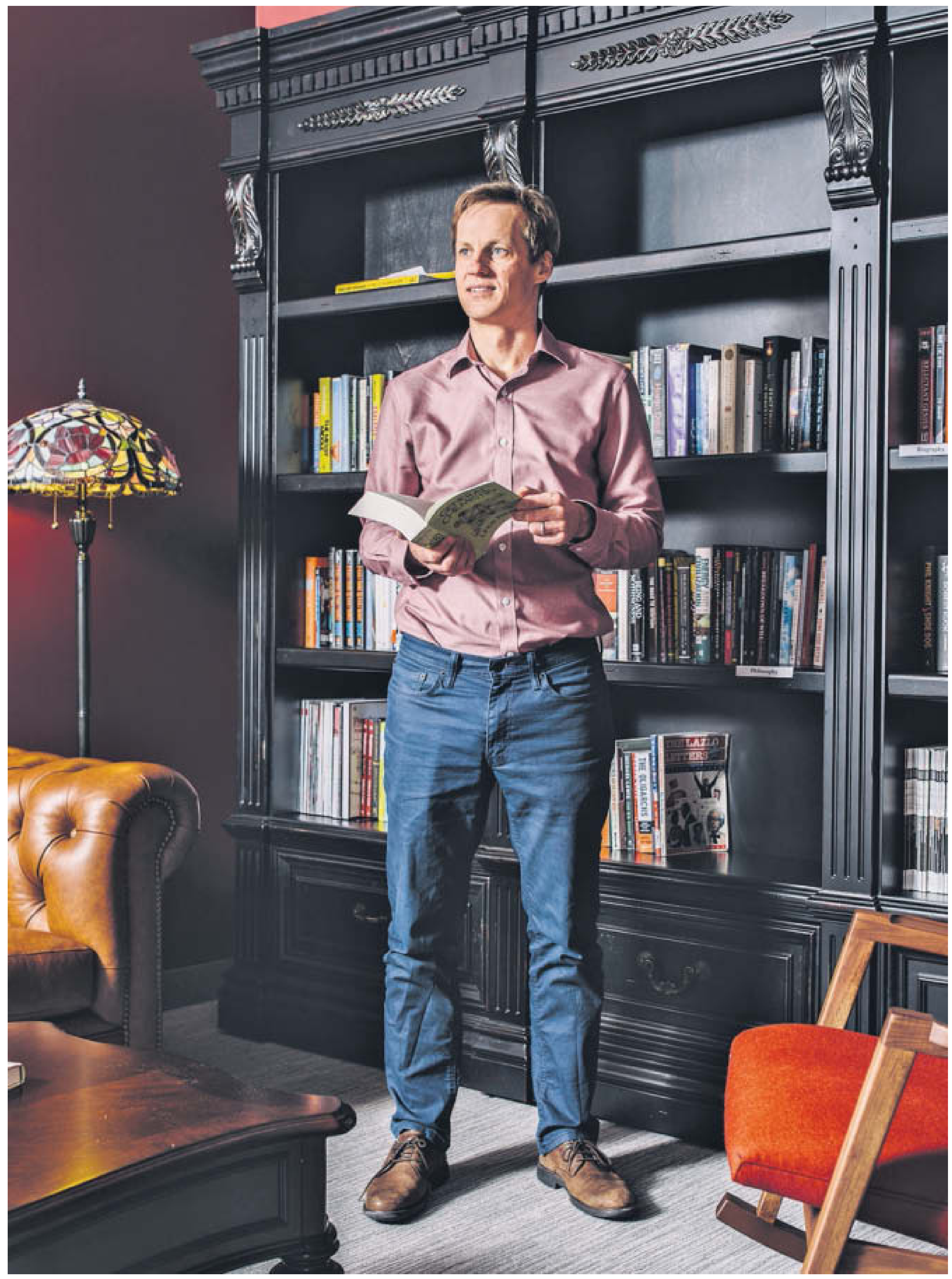
It may sound as if Elsevier is about to fall off a cliff, but that is not how the company sees it. Gemma Hersh, head of policy at the publisher, said: "We're very relaxed about the future." Elsevier, she said, has been offering "open access" for nearly all its journals for more than a decade, yet more than 80% of authors choose to go behind the paywall.

Unlike Academia's model, however, Elsevier charges thousands of dollars up front to the author or institution to offer it open access. Those fees are necessary, the company argues, because even though content is free, curating and producing it is costly.

Elsevier manages 87,000 editorial board members and 22,000 editors who field 1.6m article submissions annually. Hersh said: "Open access has been around for more than 20 years. I'm not sure where the point of anything new is in it." At Relx's annual results on Thursday, the company is expected to reveal another set of bumper profits.

Despite the apparent ability to hold back the tide that has swept through other publishing industries, be it music or newspapers, a former executive, who spoke on condition of anonymity, said that inside the company there is growing alarm: "The culture at Elsevier has always been 'protect the profit'. They'll put a brave face on it, but internally, things are heating up."

STEPHEN LAM



Richard Price wants to offer free access to all research ever published

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The executive pointed to the abrupt retirement this month of Ron Mobed, who has run the journals business since 2012. He will be replaced by rising star Kumsal Bayazit, former chief strategy officer who then ran Reed Exhibitions.

What Elsevier has done so skilfully is control each part of a circular system that determines not only which papers get published, but how academics are recognised and rewarded for their work, and how research funding is divvied up.

It works like this. Say a cancer researcher makes a breakthrough. He or she will send an article to a journal, such as The Lancet, for publication. Unlike Academia's crowd-sourced approach, an editor at The Lancet will pick a couple of experts to assess the research. Most often, they will reject it outright — rejection rates run in the high 90% range — or order the author to "revise and resubmit". The time between an article being submitted and published can be a year or more.

Getting a paper published in a "high-impact" journal such as The Lancet is step one. Just as critical is the number of times the article is cited by others. These data points are dropped into a soup of "bibliometrics" — scores that measure the professional standing of a given researcher.

The former executive said: "The way you get promoted and the way you get funding as an academic is based on the ranking system. Elsevier has inserted itself quite brilliantly into the top three or four major systems." The company has done this by consolidating its hold on many of the top journals in any given field.

Enter Richard Price. He started Academia in 2008 with £312,000 from Hoberman and a few other angel investors. He moved to San Francisco — and then struggled. By the end of 2012, Academia had signed up just 6m users. However, a bitter revolt by academics against the top publishers in that year helped his cause.

In recent years subscriptions have surged. The site now generates 45m page views a month, of the more than 20m papers it has available — a fifth of the 100m papers ever published.

Price said: "An internet-first approach to communicating discoveries will supplant the pre-internet model. That means there'll be a system that's completely based on the internet where you upload, and it gets disseminated not a year later, but instantly."

Elsevier is betting it can prove the disruptors wrong — a trick it has been pulling off since the dawn of the internet age. The question is: how long can it last?