

Learned Publishing, 20, 191–195
doi: 10.1087/095315107X204049

CASE STUDY

Going all the way: how Hindawi became an open access publisher

Paul PETERS

Hindawi Publishing Corporation

© Paul Peters 2007

ABSTRACT: *As the Hindawi Publishing Corporation approaches its tenth anniversary, the author looks back at the history of Hindawi and examines a number of challenges that the company has faced over the past decade. These challenges include the rapid expansion of the company's workforce, the establishment of a standard editorial system for its journals, and the conversion of Hindawi's entire operation to an open access publication model. Although some of Hindawi's characteristics may not be common among other publishers, many of the challenges that Hindawi has faced are the result of recent developments within the scholarly publishing market that have implications for the entire industry.*

Introduction

In less than a decade, the Hindawi Publishing Corporation has expanded from a single journal and a handful of employees into a rapidly growing publishing operation, with over 60 journal titles and a staff of around 200 people. In order to maintain this growth, Hindawi has made significant investments in both IT infrastructure and business development, enabling the company to expand into many new areas, while undergoing a complete transition to an open access publication model.

A number of important developments within the scholarly publishing industry have contributed to the changes that Hindawi has undergone during the past ten years. The rise of the Internet has enabled publishers to adopt alternative business models, develop useful new features, and manage the editorial aspects of their journals in ways that were simply not possible during the print era. Hindawi has been extremely fortunate to have entered the world of scholarly publishing at a time when publishers are able to redefine their role within the scholarly communications system, and it is in this context that I would like to examine the challenges and opportunities that Hindawi has faced during these past ten years.

Hindawi's history

With no formal experience in scholarly publishing, other than their limited roles as authors and readers, Ahmed Hindawi and Nagwa Abdel-Mottaleb launched the Hindawi Publishing Corporation in late 1997. Having developed an interest in scholarly publishing during their graduate studies at the University of Pennsylvania, Hindawi and Abdel-Mottaleb believed that their publishing operation would be able to build upon new opportunities that were emerging as scholarly journals moved online. Because



Paul Peters

of the company's location in Egypt, which provides both a low cost base and access to a large workforce of ambitious, well-educated, young professionals, Hindawi's strategy has been to provide labour-intensive services at a level that is not economically viable for most publishers based in the West.

In its first five years, Hindawi built a small, but growing, collection of peer-reviewed journals through a combination of acquisitions and new launches. The infrastructure and workforce established during this period provided a foundation for Hindawi's rapid growth, which has continued at an annual rate of more than 40% for the past several years. Moreover, Hindawi's initial experience with scholarly publications had already begun to show that the role of publishers was bound to change as the scholarly communications system adapted itself to a networked, online environment.

While learning the business of publishing without the benefit of prior experience, Hindawi's leadership began to see both the advantages and the limitations that the company was likely to face in competing with established publishers. By building an economically competitive publishing operation from the ground up, Hindawi could afford to provide many labour-intensive services for a fraction of the cost of its competitors. By offering full administrative and editorial support to its editors and referees, developing its own web-based submission and publication platform, and ensuring the publication quality of every article using an extensive in-house production system, Hindawi was able to attract an ever-growing number of authors, editors, readers, and referees. Coupled with this growth was the steady increase in Hindawi's revenue, mainly due to the company's success in expanding existing titles acquired from other publishers. However, along with its early successes came a keen understanding of the difficulties that the company would face as it continued to expand its publishing operation.

In many ways, the barriers to entry for new publishers had fallen a great deal during the 1990s, but in other respects they were more forbidding than ever. Due in large part to negotiated pricing schemes, such as the 'Big Deal' and consortium-level subscrip-

tions, smaller publishers lost much of their ability to attract new institutional subscriptions, and in many cases even to maintain their existing subscriber base. During this period, it became clear to Hindawi's leadership that the trend towards greater consolidation among publishers, along with an increasing shift to negotiated pricing, would soon put the company's subscription revenues in jeopardy. At a time when the 'serials crisis' was forcing libraries to cancel subscriptions to journals that they had held for years, it was unclear how Hindawi could continue its rapid expansion if its newly launched titles would be unable to attract a sufficient base of subscribers. So, although the company had achieved remarkable success as a subscription-based publisher during its first five years, there were growing concerns that it would be unable to compete in the changing subscription market.

Looking for a more effective business model that did not rely on revenue from library budgets, Hindawi began to experiment with a hybrid open access model in late 2003. By the end of 2004, Hindawi had converted two of its subscription-based journals to a full open access model, and had begun to develop a number of new journals that would be launched as open access titles. By the end of 2005, having already seen some early success in its open access journals, Hindawi launched seven new open access titles and converted six existing subscription-based journals to open access. It was still too early to know whether publication charges would be able to replace subscriptions as the main source of revenue for Hindawi's journal collection, but there were already some promising signs.

In 2005, the size of Hindawi's first two open access titles had more than doubled, and the uptake in its hybrid open access journal had grown from 14 authors in 2004 to over 60 in 2005. Moreover, Hindawi began to see that in an open access model its strengths (providing high-quality services to its authors, readers, editors, and referees) would be amplified, while its weaknesses (attracting a large base of institutional subscribers) would become practically irrelevant. So, during 2006, Hindawi focused all of

*it was unclear
how Hindawi
could continue
its rapid
expansion*

its development efforts on rapidly expanding its collection of open access titles.

During 2006, Hindawi published over 1,000 open access articles and developed a collection of open access journals consisting of more than 50 titles. By the end of 2006, Hindawi's leadership decided to eliminate the company's subscription-based publishing program altogether, by either divesting or converting its remaining subscription-based journals. On 31 January 2007, Hindawi sold four subscription-based journals to Oxford University Press, and a few weeks later converted its last remaining subscription journals to an open access model.

Only two and a half years after converting its first journal to open access, Hindawi made the ambitious decision to completely redefine its business model and fully embrace open access publishing. Such a decision was not made lightly, especially given that publication charges accounted for less than half of the company's revenue in 2006. However, Hindawi's open access collection had already reached profitability, despite the fact that most of its open access titles were only a few years old, and it was clear that a business model based on publication charges could offer a number of strategic advantages that would enable the company to continue its rapid expansion into all areas of science, technology, and medicine.

Lessons learned

Although it may not be wise to look back and try to come to any conclusions in the midst of such a major transition, I will venture to do just that because I believe that Hindawi's experience can provide some important insights into the changes that are occurring throughout the scholarly publishing industry. Broadly speaking, there are three major obstacles that Hindawi has had to overcome during the past ten years. The first was building, from the ground up, a workforce and infrastructure that could compete with the most well-established publishers, without having any prior experience in the scholarly publishing industry. The second was developing and implementing an editorial framework and support system to manage the peer-review process for every

journal in Hindawi's collection. Finally, in order to adapt its entire journal collection to an open access publishing model, Hindawi was forced to re-evaluate several key elements of its publishing operation and to engage members of the research community in an ongoing discussion of this new model.

Building Hindawi Publishing

During its first year, the company consisted of only a few employees working out of an apartment, trying to learn the inner workings of the scholarly publishing industry as quickly as possible. In less than 10 years, the workforce has grown to around 200 full-time employees, and a robust system has been put in place to enable rapid expansion. While building this sort of operation would be difficult in any environment, the challenge was even greater since none of Hindawi's staff have any prior experience in scholarly publishing. However, being able to approach journal publishing without any pre-existing notions of how things should be done has forced Hindawi to consider carefully every aspect of its business. Moreover, having developed the company's infrastructure with the most recent technologies in mind, Hindawi has been able to create an efficient publishing operation without the baggage that hinders many well-established publishers.

At a time when many publishers are becoming increasingly reliant on third-party vendors to handle key elements of the publishing process, Hindawi has focused on building a well-integrated publishing operation that is run entirely in-house. Taking this approach while undergoing rapid expansion certainly has its costs; any delays in expanding one part of the company can create delays for the rest of the business. However, it enables better quality control and provides much more flexibility, since changes can be implemented in a matter of hours or days, rather than weeks or months.

As an example, we recently introduced unique user identification numbers to improve identification of our authors, editors, readers, and referees, and we were able simultaneously to update our submission and review process, our internal production system, and our online delivery platform to

a business model based on publication charges could offer a number of strategic advantages

accommodate this change. For this to be possible, all teams within the company must work closely together, and senior management must keep a close watch over every part of the business.

In order to keep the organization running as efficiently as possible, and to identify quickly any problems that may arise, an integrated electronic infrastructure has been expanding into every part of Hindawi's operation. At the core of Hindawi's business is a digital publishing platform that unifies our submission and review system, the internal production process, and the online publication of each article. This platform was built from scratch by our in-house IT development team, which consists of more than 15 full-time developers, and it is updated frequently to include new features that improve the experience of both our users and our staff. In addition, this platform helps our employees to identify problems quickly when they arise, either during the peer-review process or when an article is undergoing production; it also enables the company's management to continuously monitor and evaluate the performance of our staff. While the cost of developing and maintaining this digital platform is one of the company's greatest expenses, the value that it provides is absolutely immeasurable. One of the main lessons that Hindawi has learned during these past ten years is that automation and integration are the keys to building an efficient publishing operation.

*we try to
reduce the
burden that we
place on our
editors and
referees*

Establishing an editorial framework

One of the most significant changes to journal publishing brought about by improved technology has been the ability of publishers to involve themselves in the editorial process of their journals in new ways. Before the introduction of electronic submission and review systems, publishers who relied on external editors and referees to run the peer review of their journals had little control over how the process was carried out. In many cases, a journal's editor-in-chief would run the entire editorial process with virtually no involvement from the publisher.

Although Hindawi relies on thousands of external editors and referees to select the

content of our journals, we believe that it is one of our core responsibilities to ensure both the speed and the quality of the peer-review process. Since our journal collection was built through a combination of newly launched journals and titles that were acquired from other publishers, several different editorial structures were in use across our collection. When we started to look carefully at how these structures were working, it became clear that our healthiest journals were those that actively involved the journal's editorial board members and referees, as opposed to those that were more heavily dependent on the journal's editor-in-chief. Not only did a well-distributed editorial structure ensure that each manuscript was carefully reviewed by a number of independent researchers, but it also engaged the research community in a more direct way.

Over the past few years we have moved all of our journals onto our electronic Manuscript Tracking System, and worked with our editors to implement the editorial guidelines that we have established. These guidelines essentially require that, for a manuscript to be accepted for publication, it must be reviewed by at least two independent referees, and both the editor-in-chief and the associate editor assigned to handle the paper must agree on its acceptance. Since this system involves a number of different people in the review process, most of whom have busy schedules, we try to reduce the burden that we place on our editors and referees by providing comprehensive administrative support. Our in-house editorial staff carefully monitor each submission until a final decision has been made; if any problems occur, they quickly intervene to resolve the situation. For Hindawi, one of the greatest benefits that has come from our investment in technology has been the ability of our staff to interact directly with our editors, authors, and referees to ensure that the peer-review process runs as smoothly as possible.

Moving to open access

The third great challenge that Hindawi has faced was that of converting our entire journal collection to an open access publication model. In and of itself, converting a journal

to open access is not particularly difficult, since open access journals are run in essentially the same way as their subscription-based counterparts. However, when we began converting journals to open access, and developing new open access titles, we started to look more closely at a number of questions regarding the value that we, as publishers, can provide to the researchers that we serve. Before we could ask authors to pay for the publication costs of their work – from their often strained research budgets – we had to have a very clear idea of what we could provide to them that would be worth paying for.

The first role that we identified for ourselves was that of a facilitator for scholarly communication, since we provide a framework within which researchers' work can be evaluated and disseminated. We believe that Hindawi has a responsibility to provide the best possible infrastructure and support to enable this evaluation and dissemination, and this has been our main motivation in taking an active role in the editorial aspects of our journals. One of the best ways to attract authors is to ensure that their submissions are given the attention that they deserve, which can only happen by working closely with a journal's editors and referees.

Another way in which we provide very tangible value to our authors is by thoroughly preparing their manuscripts for publication, with as little delay as possible. Since the production process is a key component of the value that we create, our 90-person in-house production department provides high-quality copy-editing, reference validation, graphics relabelling, typesetting, and XML markup. Moreover, since we publish all of our journals on an article-by-article basis, and do not impose page budgets, we are able to publish the final version of an author's work within an average of 6–8 weeks following acceptance. In fields where progress can be measured in months rather than years, providing our authors with fast publication, while preparing their work in a professional manner, has been one of our main assets in attracting authors.

Finally, by embracing open access publishing, Hindawi is better able to serve its authors by making their articles both access-

ible and visible to all interested readers. One of the main advantages that open access has given us has been our ability to distribute our authors' work widely without having to generate revenue from readers. We not only make our articles freely available on our website, but also actively distribute them through subject-based repositories and third-party aggregators. In addition, since we release articles using the Creative Commons Attribution License, our authors and readers are free to redistribute them in any way they wish. The value that this creates for our authors is immeasurable, since the main reason for authors to publish their work in the first place is to have it read by as many of their peers as possible.

During the past two years we have been engaged in an active discussion with our authors and editors about the value of an open access publication model. What we have heard is that researchers have limited resources with which to pay publication charges, so we must work hard to show them the value that we can provide. At the same time, we have heard from a large number of researchers who are dissatisfied with the way that the scholarly publishing system works, and it is in listening to these concerns that we can find new ways to improve the services that we provide.

Conclusion

In examining Hindawi's achievements over the past ten years, it is clear that experimentation and innovation are vital to the success of the company. As we look to the future we see many exciting opportunities to introduce new features, experiment with new editorial structures, and reach out to the scholarly community in new ways. In an industry that is often resistant to change, Hindawi has found that one of its greatest assets has been its willingness to experiment, since only through experimentation can publishers find new ways to provide value to the community of scholars that we aim to serve.

Paul Peters

Head of Business Development
Hindawi Publishing Corporation
Website: <http://www.hindawi.com>
Email: paul.peters@hindawi.com

we had to have a very clear idea of what we could provide that would be worth paying for