CHANGE THE FACE OF ACADEMIC PUBLISHING THROUGH IMPROVED DISSEMINATION, DISCOVERABILITY, AND REUSABILITY OF SCHOLARLY RESEARCH.

change. Mark partnered with DataCite for the provision of DOIs for research data.

As for licenses, Mark chose Creative Commons. The open-access and open-science communities were already using and recommending Creative Commons. Based on what was happening in those communities and Mark's dialogue with peers, he went with CC0 (in the public domain) for data sets and CC BY (Attribution) for figures, videos, and data sets.

So Mark began using DOIs and Creative Commons for his own research work. He had a science blog where he wrote about it and made all his data open. People started commenting on his blog that they wanted to do the same. So he opened it up for them to use, too.

People liked the interface and simple upload process. People started asking if they could also share theses, grant proposals, and code. Inclusion of code raised new licensing issues, as Creative Commons licenses are not used for software. To allow the sharing of software code, Mark chose the MIT license, but GNU and Apache licenses can also be used.

Mark sought investment to make this into a scalable product. After a few unsuccessful funding pitches, UK-based Digital Science expressed interest but insisted on a more viable business model. They made an initial investment, and together they came up with a freemium-like business model.

Under the freemium model, academics upload their research to Figshare for storage and sharing for free. Each research object is licensed with Creative Commons and receives a DOI link. The *premium* option charges researchers a fee for gigabytes of private storage space, and for private online space designed for a set number of research collaborators, which is ideal for larger teams and geographically dispersed research groups. Figshare sums up its value proposition to researchers as "You retain ownership. You license it. You get credit. We just make sure it persists."

In January 2012, Figshare was launched. (The *fig* in Figshare stands for *figures*.) Using investment funds, Mark made significant improvements to Figshare. For example, researchers could quickly preview their research files within a browser without having to download them first or require third-party software. Journals who were still largely publishing articles as static noninteractive PDFs became interested in having Figshare provide that functionality for them.

Figshare diversified its business model to include services for journals. Figshare began hosting large amounts of data for the journals' online articles. This additional data improved the quality of the articles. Outsourcing this service to Figshare freed publishers from having to develop this functionality as part of their own infrastructure. Figshare-hosted data also provides a link back to the article, generating additional click-through and readership—a benefit to both journal publishers and researchers. Figshare now provides research-data infrastructure for a wide variety of publishers including Wiley, Springer Nature, PLOS, and Taylor and Francis, to name a few, and has convinced them to use Creative Commons licenses for the data.

Governments allocate significant public funds to research. In parallel with the launch of Figshare, governments around the world began requesting the research they fund be open