

A future of intelligent publishing

Scientific publishing was simpler when we only had paper to use. In the Earth sciences, for example, we had printed maps, books, reports, pamphlets and journal papers, all very familiar to publishers and readers. Now the world has gone digital, the publishing job has become more complicated but at the same time more exciting.

In the NERC British Geological Survey (BGS), we are running an 'Intelligent Publications' research and development project to look at how we can modernise our published outputs to embrace this rapidly evolving digital era.

We are rethinking the process of scientific writing itself, using a 'wiki' approach similar to Wikipedia but carried out in-house and under the watchful eye of scientific editors. Text that is 'born-digital' like this is easy to break into packages and to use as a resource for future digital publications. It can also be linked intelligently with other information such as images, databases, maps and even 3D models. Furthermore, this digital data can readily be repurposed for different publishing platforms, possibly in as yet unthought-of ways on the semantic web.

We are also considering what a new 'range' of digital publications produced by the BGS might look like. Here the problem – but also the opportunity - is the sheer number of possibilities that digital publishing offers. We have found it best not to think simply in terms of a digital update to our existing series of publications (such as BGS Memoirs) but rather to think of a new, much more flexible range of publications presented in a spectrum of styles and delivered on an array of digital platforms.

The possibilities are many. For example, we might be able to produce a publication in a 'discovery' style for a public audience, delivered using a light mobile platform such as a tablet computer app. Or alternatively, we might present a more 'in-depth' scientific style for a research audience, delivered through a richer website platform. Moreover, because the publication can be assembled from a range of linked digital elements, it could take any form, for example, an interactive digital map or 3D model or to a written publication with embedded digital elements. We will be ramping up our trials of these sorts of publications over the next year and are keen to receive feedback! The possibilities for revolutionising the way we present our science are very exciting.

The BGS is not alone of course in tackling this new world of digital publishing. Popular scientific publishers such as National Geographic are beginning to provide a mixture of web based, mobile and printed outputs. Leading journal publishing houses are moving towards interactive, web-based outputs for peer-reviewed papers, such as, Elsevier's 'Article of the Future'.

The winner can only be the user in this race to a digital future as providers of information compete to retain their attention with a rapidly broadening array of interactive publications. The challenge for publishers will be to remain as authoritative islands in this ever-widening sea of digital scientific information.