Spring, 2007

A Web Developer's View of the Research World and the Entertainment Industry

- Shaun Haber (PAL & CCE)

Having worked with two LTER sites for a number of years, I left to pursue web development as a profession within the entertainment industry. This provided me an opportunity to compare the work of a programmer within the academic world with that in the entertainment realm. The two industries are similar in many ways. Granted, there are some obvious material differences. The entertainment industry is high-profile and generally pays better than academia, but academia tends to be a "quieter" working environment.

The similarities? A web developer's work in academia typically involves the same core set of duties and responsibilities as in entertainment. More interestingly, a web developer in both industries experiences the same social disconnect among peers and co-workers unfamiliar with the technical "know-and-how". However, academia may offer a calmer environment for bridging the communication gap caused by the technical polarity.

I can safely say this because I've worked in both arenas. My background begins in 2004 at the Scripps Institution of Oceanography, where I joined Karen Baker and Jerry Wanetick in building a social framework to encourage the participation, collaboration, and the exchange of scientific data and ideas among various faculty, staff, and students. Our local vision took a grounds-up approach as we examined ways to improve our technical infrastructure. (This was an opportunity for me to experiment with various open-source content management systems, eventually settling with the blogging platform WordPress.)

We grew a small community with engaged participants. We called our community "Ocean Informatics", however, it evolved into something more. Ocean Informatics became an abstraction where a programmer (i.e. myself) and a scientist (i.e. someone else) could productively discuss ideas involving the integration of scientific data and technology. One example involved creating the SCCOOS data schema, where experts from varying fields (oceanography, information management, computer science, etc.) worked together in building a relational database that would store millions of records of streaming data from moorings.

In 2006, I had the fortunate opportunity to take a technology project management role at a major recording label in Burbank. Saying goodbye to Scripps was hard, but I was eager to move forward with my career and face new challenges in a new environment. In some ways, my job hasn't changed. Working in the New Media department, which spans technology and marketing, I use the same technologies (PHP, MySQL, Subversion, etc.) as before. I manage the same social disparity between the technical and non-technical people.

A scientific researcher in academia is very like a marketing director in entertainment with respect to the internet. Both depend upon a variety of technologies to expose their work to a larger respective audience. (A scientist publishes data to the scientific community, and a marketing director promotes a band to its core demographic). Essentially, they both embrace the openness of the internet (HTML, XML, APIs, etc.) to publish data and share content. This requires a strong knowledge of the latest technological tools and trends.

Though we exchange plenty of ideas in the New Media department, involving marketing and the internet, the industry often moves extremely fast and offers limited time for grass-roots participation. It is a business, after all, and has a very different primary need than an academic institution, which places more value on research and experimentation. The music industry has no time or interest in supporting a meta-community that encourages collaboration from people of various fields and that studies itself. If it did, maybe we could call it "Music Informatics"?

With Ocean Informatics, I can stay connected with the community, despite lacking a physical presence. This is beneficial for everyone involved. I can occasionally contribute my time, knowing my input will be well received. This includes posting to a blog, participating in an online video chat, or coming down in person to help troubleshoot technical issues (e.g. last month I helped a PI investigate a software bug).

It is optimistic to assume the technical polarity I have experienced is weakening as more people grow comfortable with computers and learn to embrace the latest technologies to fit their needs. However, there still exists a great disparity between technical and non-technical people in any industry. It is important to realize this is a persistent, global concern, and not only limited to science. Finally, it is noteworthy that an academic institution provides an environment suitable for studying this communication gap and simultaneously shrinking it.