

Backgrounder – instructional media+magic Inc.

im+m is not a traditional company. As a corporation, it facilitates the association of information technologists and subject-matter experts for higher education IT projects. Team members include im+m and Sigma Systems Inc. employees, contributors from colleges and universities, and partners from other companies. Project development follows the successful “open research and development” model combining talent and sharing resources in an open-information environment.

im+m’s first project was developing education technology to increase the retention of biology students planning on being in the health professions. It achieved a 30% increase of student success in the classes of a talented and motivated faculty member. im+m also developed technical plans for Arizona Community Colleges to implement two-way video communication permitting students to attend classes remotely.

Before Internet search was ubiquitous, im+m partnered with NCHELP to develop CD-ROM InfoPaks with a searchable library of documents relating to financial aid, including copies of Federal Student Aid publications. A “Common Manual” for loan processing was authored by an NCHELP working committee and published by a small team of guaranty agency contributors and im+m staff. As technology developed, both became part of the NCHELP website. Daily Briefs, adopted and authored by NCHELP staff, became the morning read of many financial aid professionals.

Because of the difficulty experienced by students to quickly and accurately identify the servicers of their student loans, the im+m team created a software prototype that would assemble the information from multiple servicers and respond to students who logged in with guaranty agencies and lenders in real time over the Internet. NCHELP selected, with im+m participation, a contractor that brought “the Meteor Network” to a success. The lead developer of the project later joined the im+m team.

im+m was a principal contributor to Federal Student Aids “Modernization Plan” and advisor for the subsequent implementation of the Common Origination and Disbursement system.

The University of Delaware, Boston College, and Princeton University Information Technologists recruited im+m to lead an Andrew W. Mellon Foundation project to develop uPortal as open-source software and to guide its international implementation. Organized as a JA-SIG project, uPortal remains one of two open-source administrative software products with more than 1,000 implementations. The William and Flora Hewlett Foundation asked im+m to lead the development of Sakai learning management system community. im+m led and encouraged participation and implementation. Implementations exceeded the Hewlett Foundation’s goal with more than 200 colleges and universities using the software at the end of the second year.

The U.S. State Department contracted with im+m to lead a short-term project to extend instructional technology to university students in Algeria under the Algerian Ministry of Higher Education and Scientific Research.

Because of the effectiveness and cost-savings association with open-source software, the UK-based Joint Information Systems Committee (JISC) selected im+m to lead a team of researchers seeking to improve research productivity using information technology. This was a five-year project that later extended to Italy, Germany, Switzerland and France.

This research led to expertise in Intellectual Property. im+m was asked to author a series of feature articles for a Intellectual Property Magazine on innovation, patent and copyright, and the Internet. The magazine serves lawyers and corporate directors of research with global circulation.

im+m and Sigma Systems Inc. contributed a document on comparative standards of name and address to K-12's Schools Interoperability Framework Association (SIF Association) and another on technology choices done for the U.S. Department of Defense Advanced Distributed Learning laboratory. This was a typical contribution to standards development. im+m continues to work with the HR-XML human resources and IFX financial standards organizations.

im+m staff joined Sigma Systems Inc. to develop a student accounts receivable system using current technology and incorporate recent major regulatory changes. The team was recruited from previous im+m employees and consultants for this two-year effort. This open-source software was sponsored by the University of Maryland, College Park and the University of Southern California as participants of the Kualu Foundation Inc. Implementation is beginning at Boston College and expected to expand to others in the coming months.

The success of these projects appears to come from these practices:

- The team is a collection of talented individual with experience in current technology with a record of success, and productive integration with subject-matter experts.
- The project is a collaboration with open communication among all parties.
- Research on "prior art"—what people have done before—and participation in industry standards bodies exploits what others have done and ensures interoperability with other software, improving both quality and value to the end user..