elearning

This is the weblog of Matic Media Ltd, focussing on a small number of topics in e-learning that are of especial interest to the company: benchmarking e-learning, quality of e-learning, costs of e-learning, change management, procurement paradigms for e-learning systems, next-generation technologies to underpin e-learning, e-universities around the world, and critical success factors of e-universities and national e-learning programmes

Coping in a world with software patents

Summary

This posting is designed to suggest that individuals and professional associations in the e-learning world consider seriously the steps they might take to cope more adequately in a world where software patents are increasingly more prevalent. There is a slight UK focus but it will apply all the more so in the US.

I wrote a version of this paper initially for the UK Association for Learning Technology (ALT) but was encouraged by reactions to it from people including Seb Schmoller to make it more widely available. His posting Should organisations now put public knowledge and knowhow on Wikipedia instead of publishing it themselves? Views requested is relevant.

The paper has been "inspired" (if that is the word) by the recent flurry of activity caused by the assertion by Blackboard of a software patent which appears to many to patent some key non-proprietary aspects of enterprise-scale e-learning, and clear indications that other large companies are following suit, not only in the US but increasingly in the EU and in Asia/Australasia. It is "informed" (or so I hope) by a number of recent pieces of historiographical work I have done (some paid, some unpaid) including:

- literature search on benchmarking e-learning
- history of the UK e-University
- historical literature search on the continuing relevance to e-learning of the MIT90s strategic framework developed in 1991
- labours in the Wikipedia vineyard on the history of virtual learning environments.

All these tasks were made much more complicated by the fragmentary nature of the information from fomer eras and the speed with which even recent vital information decayed from the web.

Disclaimers

1. The posting does **not** take a view on whether software patents are desirable, only that it is likely that they will be more widespread (and go more and more beyond the US) and more used. It argues that if the steps below are taken, then it will be much easier for defenders to find "prior art" when patents (or prospective patents) are being challenged, but also much easier for patent searches to be carried out by companies and their patent agents. Thus it aims to be patent-

neutral when patents are researched and granted "properly" (but it is not "patent-troll-neutral").
Out of scope for this posting is the issue of whether professional associations should decide to have a policy regarding software patents (for - or against - or a more complex view).

2. I am not a lawyer and nothing in this posting should be construed as giving legal advice. Those seeking such advice should consult suitably qualified and accredited individuals.

Steps that might be considered

1. By individuals

This guidance is particularly oriented to individuals who have jobs involving research or other activities likely to generate specifications, products, systems etc of relevance to patent searches and patent claims in the general area of e-learning.
Much more than in the past, individuals move between jobs, including between academia and industry. Increasingly, individuals have portfolio careers and may have formally retired from their main employer yet still be active in research and consultancy.

1. Individuals should try to ensure that former employers are aware of their current contact details and as far as possible ensure (if they wish) that emails to a former email address are automatically bounced back to the sender with their current email address. (This is trivial to do using "out of the office" functions, but is remarkably rare. It is unlikely that more than a small minority of staff in any institution will wish this.)
2. Individuals should consider having a lifetime email address, which need not be public, but to which key emails and documents are sent – thus allowing a long-term archive. This is increasingly done by the "net generation", but is still regarded as vanity or impertinence in many organisations. Selection of an email host and client software is crucial in order to have long-term guarantees of archiving.
3. Individuals who regularly develop or intend to develop "inventions" (taken in a wide sense) should ensure that they are more aware of the Intellectual Property aspects of these (copyright, moral rights, patents, etc) including securing an audit trail for the documents if they are ever needed again.
4. Individuals who develop material likely to be of interest in the patent world should take advice on storage formats suitable for long-term archiving. In many cases it will be prudent to create a version of the material with lower presentation quality but longer longevity. (This has been done with Internet specs for many years, creating their archival versions as text files.)
5. Individuals who regularly offer advice to associations of which they are members (either directly or via an employer) should ensure that they are more aware of the Intellectual Property aspects of any contributions they might make to association documents, and seek to assert them if appropriate.
6. In general, as a final catch-all, individuals are likely to have to empower themselves more and rely on organisations less, when considering long-term storage of material. It is accepted that this has cost and storage (including physical storage) implications for individuals' homes. It is outside the scope of

this paper as to how individuals justify such implications to themselves and those that they share their homes with [she made me write this].

2. By institutions

This section is phrased in terms of institutions from the university and college sectors, but could well apply more widely. There is some orientation to the UK but I expect that many aspects apply to Canada, Australia, New Zealand and the US.
Institutions are by and large getting *worse* not *better* at maintaining information. Changes of staff, reorganisations, public relations reasons, a desire to break with the past (e.g. caused by a change of name or role) and content management systems (when crudely implemented) all conspire to ensure that material is lost or its location is moved. The following are the suggestions for institutions:

1. Institutions should commit to maintain the email address of a former employee, on request (not to be unreasonably refused, and certainly by default for "faculty" (academic staff) who request it) for a period of years (10 is suggested) from the date of the employee leaving, and renewable on request. There are no storage implications, in that it is sufficient that email is rejected with a message such as "no longer at this email – believed to be at x@y.z". There is public relations value that an organisation can gain from this, in terms of supporting collaborative research, etc.
2. Institutions should choose their email software for server and client with longevity in mind. There should be no deletion of messages and attachments based purely and automatically on time elapsed. (It is pathetic to watch the efforts that people go to in moving attachments from mail storage to file storage to evade quotas.)
3. Institutions should ensure that they are more aware of not only the Intellectual Property aspects of key documents (copyright, moral rights, patents, etc) but also the archival aspects, including securing a legally valid audit trail for the documents if they are ever needed again as "certified originals".
4. Institutions should take advice (e.g. from JISC if they are universities or colleges in the UK) on storage formats suitable for long-term archiving. In many cases it will be prudent to recommend authors to create a version of the material with lower presentation quality but higher longevity. (IETF have been doing this for what seems forever.)
5. Institutions should have an IPR policy covering staff who regularly offer advice to associations of which they are members (via their employer) – such associations to include learned societies and software user groups (including for LMS vendors).
6. Institutions should consider having a time-out period after which rights in all e-learning material revert to the author(s). This time-out period may have to depend on the topic area, but for e-learning software and e-learning material a period of 10 years is suggested.

3. By Professional Associations in e-learning

This includes such bodies for individuals and universities as

- ALT and UCISA in the UK
- EDUCAUSE in the US

- ASCILITE, ODLAA and ACODE in Australia
- (fill in your own favourites)

If the above principles are accepted then in my view it is important that professional associations are seen as leaders in and earlier adopters of these principles. Thus:

Professional associations should put into practice the principles enunciated above

In particular:

1. As a gesture towards coherence of the community of practice and a service to Trustees / pro bono Directors (past and present), professional associations should extend to all such office-holders, on request, the facility of having a brief web page about them linked to their current details, in perpetuity. This again has public relations advantages for the associations, for example in showing how many previous "eminences" have advised them.
2. Professional associations should consider setting up their own history/archival SIG for e-learning or collaborating in a more general national history/archival SIG for e-learning (with a federated approach across countries). There is public relations potential for this and potential funding in some countries – European readers should note in particular the announcement by the Kaleidoscope EU project (which has several UK members) on Meeting Challenges of Creating an Open Research Archive in the Field of Technology Enhanced Learning.

4. By national bodies

This section covers suggestions as to what "national bodies" should do. By this I mean such bodies as JISC in the UK, SURF in Netherlands, perhaps EDUCAUSE in the US. In some countries where there are no national bodies of that sort, some of the "peak bodies" (to use an Australian phrase) might have to suffice.

1. A national body should maintain a formal database of all current and former researchers within (or who were within) its jurisdiction, including their current contact details (if alive, if known and if the researchers wish them to be publicly known). Possibly the practice could build on what the Research Councils (ESRC etc) do already in the UK – or what has been tried with limited success by the EU with Europa. It will be the onus of researchers to ensure that relevant national bodies know of changes in their contact details.
2. A national body should have a simple archival policy – *no document should "ever" be deleted or the underlying file (logically) mov*ed - even if (in rare cases) its URL has to be changed. It is assumed that storage costs will fall faster than the storage requirements for new material grows, so that old (thus compact) material is always a small fraction of current. By "ever" one is likely to mean at least the maximum period that IPR can remain extant for.
3. Without necessarily taking on the full panoply of "Open Archives", national bodies should ensure that document names and a key subset of metadata (authors, dates) are adequate before loading any document. Searches reveal that many documents in many archives are called "Untitled" by "Unknown".

4. For legal and other reasons, a small physical archive of paper copies of key documents may be needed. National bodies in key countries (UK, US, etc) should confer discuss with others the issues and benefits around the setting up of a physical archive of key e-learning documents in these countries.

Well, that's it! Comments welcome.
Paul Bacsich
09/28/2006 in Software Patents