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Copyright control for Digital Image Libraries

Where are the images?

Images are a valuable asset. Many organisations have large image libraries, though rarely are they usefully accessible internally, let alone being accessible externally to trading partners, or for sale.

Assets come from many sources, original photography, archives, press cuttings, drawings, artworks, in production quality checks (on production lines)

Media companies have assets from other sources, they are the primary business tool.

examples are news pictures, video stills, magazine pictures, archive materials, images from external libraries, computer generated images, titles, branding, rostrum.

Why exchange them?

Taking as an example a magazine, say about antiques, published by or on behalf of, a TV channel.

What happens here is that there are rights associated with images that are complex. As an example, were the antique in question a Charles Eames chair, then copyright is held by the Eames foundation over any image of their original object. Tricky.

The originators of the picture research for the TV programme thus need to be able to plan for an asset usage that intertwines with a set of complex underlying histories. WIPO, has asserted that it aims to be the canonical reference source for systems that can encompass copyright exchange, and cross international boundaries. This includes the work on DOIs (Digital Object Identifiers), and contains references to original-reference-source (owner, rights) sometimes mixed up with URNs.

But the commercial reality, is that simpler systems prevail, and that watermarking invisibly, commercial images has been much proposed, not least by DigiMarc, an Adobe Ventures LLC VC funded startup, by IBM with its Digital Library, by Signum SureSign (FBI) and others. Commercially none of them are making headway. Digimarc has used up \$83m, to gain a high visibility (in no part due to bundling with Adobe Photoshop) and aggressive marketing, and one high profile court case (Playboy). IBM's digital library initiative, has been quietly de-emphasized, and hasn't found a commercial exploitation yet. The transport wrapper system, Cryptolope now resides with the DL group within IBM.

Lets go back to the Antiques story.

A picture researcher needs to have access to information of a commercial nature, where rights are bought, traded, assigned, and crucially, re-assigned. Starting with the original TV program, the Eames chair image, has different rights assigned, if it is the sole image on the screen, or used in context (with other chairs) or referred to in print (a reference book). A researcher wants to select an image that can be used, on TV, in TV listing magazines, within TV channel education, education support printed materials, TV linked web channels, newspaper advertising for the TV program, 48 sheet poster advertising, marketing handouts, exhibition display. Also, lets not forget the magazine (and that has subsidiary rights, as it is a commissioned piece from a third party publisher) And then, to sell the underlying programme to another media channel, eg WGBH for the BBC example.

Of course, often the pre-cursor to all this is that TV programmes are now often (in the BBC case rising above 40%) co-productions, so the rights have to be dual sourced at origin. It turns out that rights attribution is the biggest legal cost in programme acquisition.

So for a humble image library....

How can you provide all the relevant rights info?

How can you find it, track it, use it for workflow process.

If the legal teams visit, can you prove that you really do have the rights to use , and syndicate (sell-on) those rights. Is this a bit like FAST, and for software.

HPLabs, Bristol, approach, has been to build a component in the system, to provide an audit trail for an image system, that is coupled with high quality viewing. We believe that to trade effectively, a combination of high quality viewing, and copyright control is needed. The whole complexity of rights management is simply too great to approach as a single commercial goal, and affected by International law requirements. Personally, I doubt this will ever get off the ground, though I salute those who are attempting things on a global scale. I think a quick and dirty, part audit approach to be more effective.

What we do, essentially, is to track in a web fronted database, specific user interactions, coupled with Just-in-Time watermarking. Each image viewed at high resolution, linked to a known user database, and with strong authentication by digital certificate, is marked on-the-fly with an invisible watermark, linked to a database entry.

Commercially, providing access to high quality images over the web, means that if you can see it, you've got the product, why should you pay?

(Søren Brandt to explain here how the watermarking works at a high level)

Lets have a look to see what this looks like in practice.

Here is our example system, for the BBC Natural History Unit.

There are several technologies here, including searching, visual searching, adaptive indexing, on-the-fly watermarking, iip previewing.

Demo

What questions arise from this?

Well there are the questions of cascading permissions.

A simple question is this:

Image library A is taken over by Image library B.

but A has images under agency agreements, that need to be transferred to B, but the underlying library has “permanent” watermarks. Does B need to remark, or can the attribution carry forward? How can this be encompassed in a suitable scheme?

Can a watermark contain a “fusible” element, that can be changed.? If so who and how would the necessary PKI run, for lookup, and who and how would pay for it?

A real life problem

A magazine publisher acquires images. It holds those in an internal system ,and negotiates with the supplying agencies to syndicate those images. Some of those images come from TV companies, such as the BBC.

The publisher is taken over, actually by another TV media group.

Now a competitor has rights to resell original material, owned by E.g. the BBC

This is a real story, the BBC found itself buying stuff, it's own, from its competitors, Kirsch.

But the lawyers get rich!!

Questions.