Information Architecture as Intellectual Property

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Introduction

Many Americans became aware of intellectual property in the context of the World Wide Web as a result of the Recording Industry Association of America's (RIAA) lawsuit against Napster. In the lawsuit, filed on December 7, 1999, the RIAA claimed the website that acted as a directory for computer users to see who was willing to share songs store on their computers was promoting and smoothing the progress of mass copyright infringement.[1] To put it another way, the RIAA was upset because people were using Napster to download intellectual property in the form of free music and those who produced it were losing money. Although Americans are now familiar with the concept of intellectual property most are unaware of information architecture and what impact it has on their everyday lives. Fewer yet have considered that information architecture could be considered intellectual property.

What is intellectual property?

According to the World Intellectual Property Organization, "Intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce." There are actually two types of intellectual property: industrial property, and literary and artistic works. Trademarks, geographic indications of source, patented inventions and industrial designs are considered industrial property and are protected by patents while literary and artistic works are covered by copyright.[2]

What is information architecture and why is it important?

With so many people relying on the Internet to get information, goods and services, the paramount issue now more than ever is that the information be well

organized and easy to navigate. Whether revenue is created via advertising on a website, services are offered for a fee or goods are sold in what resembles the more traditional "brick and mortar" model, users need to be able to navigate information space easily and find the information they need. Information architecture is what makes this possible.

"Information architecture is the art and science of structuring and organizing information environments to help people effectively fill their information needs.[3]" More importantly, however, we should look at information architecture from the perspective of the user or searcher and consider how effective information-seeking behaviors will be, in a given information environment. The success of the user is highly dependent upon the structure of that environment[4]. With respect to the World Wide Web, information architecture is the science of planning the infrastructure of the information space or website in advance, only after carefully considering what is needed with regard to website functionality[5]. Think of a building and how it is designed to make the space inside it useful. Are the rooms and hallways easy to navigate? What would happen if there was a room which had no hallway connected to it? When one considers such questions, one may realize the use of the word "architecture" in information architecture is no accident.

Who owns classification schemes and how do they generate revenue?

The Dewey Decimal System (DDC)

The Dewey Decimal Classification (DDC) system, which was developed by Melvil Dewey in the 1870s, has been owned by the Online Computer Library Center (OCLC) since 1988. It is the most widely used library classification system in the world.[6] OCLC creates revenue from its Dewey, Dewey Decimal Classification, DDC,

OCLC and WebDewey, which are registered trademarks of OCLC, by selling books and software to facilitate their use.[7] OCLC also produces revenues with its cataloging service and Connexion suite of tools which has built-in access to WorldCat, the world's largest bibliographic database.[8]

Universal Decimal Classification (UDC)

The Universal Decimal Classification (UDC), adapted by Paul Otlet and Nobel Prizewinner Henri La Fontaine from Melvil Dewey's Decimal Classification system was first published in 1904. Originally, the International Federation for Information and Documentation (FID) managed the UDC. In the 1980s, the FID and the publishers of the Dutch, English, French, Japanese and Spanish editions of the UDC founded the UDC Consortium (UDCC) to administer and exploit the UDC. The UDCC became the owner of UDC on 1 January 1992.[9] The individual members of the UDCC create revenue by producing and are responsible for hard-copy versions of the classification system, while the UDCC offers a variety licenses, typically for a 3-year period, for distributing copies of existing UDC publications, producing copies, translating existing publications into other languages or creating new editions of UDC.[10] For Example, the GERHARD project, a German search engine was reported to have paid an annual fee of 5,000 Dutch Guldens (about 2,796.11 USD).[11]

Library of Congress Classification System (LCC)

The Library of Congress Classification System copyright is held by the United States Library of Congress.[12] The library of Congress gets its funding from the United States Congress with a fiscal 2002 appropriation of $525,837,000.00.[13] It also creates

revenue by offering subscriptions for online access the Library of Congress Classification System and Library of Congress Subject Headings based upon the number of users.[14]

Yahoo!

Yahoo! was founded in 1994 by Stanford Ph.D. students, David Filo and Jerry Yang.[15] In the three months ending June 30, 2003, Yahoo! made 68% of its revenue from advertisements, 22% from various fees (auctions, personals, etc) and only 10% from listings.[16]

Google

Google is a privately held company that generates revenue by offering its search technology to companies like Yahoo! and the WashingtonPost.com as well as from advertising sales. Google uses keyword targeting to ensure that advertisements are relevant to the results page where they are displayed. This stems from Google's belief that "ads can provide useful information if, and only if, they are relevant to what you wish to find."[17]

Where do intellectual property and information architecture coalesce?

The coalescing of intellectual property and information architecture was an inevitable event that would occur with the evolution of the World Wide Web (WWW). As more information became available on the WWW and it became necessary to better organize it, two ways of systematizing information developed. These were search engines and the hotlist, organized lists of resources. Search engines rank information based on a variety of methods after obtaining that information by searching the WWW for keywords, while hotlists organize information into subject headings, which the user can then browse through. In some cases, the development of hierarchically organized

hotlists prompted the adoption of library classification schemes for subject hierarchy. Yahoo!, on the other hand, devised and indexed their own classification system[18] Although many traditional classification systems are not protected by copyright, many do require the user to purchase or license the materials (books or software), which allow for implementation. The same is true, in a way, for web based information architecture. If you want to use Yahoo, you first have to go to Yahoo.com where you will see almost instantly clues as to how they generate revenue.

Conclusion

The question of whether classification systems are protected by copyright is problematic because of the ways in which they are used and also because what exactly is protected differ depending on the system.[19] Use of the notation or classification numbers from the DDC and LCC can be used without control and many web based information architecture systems are available for use through licensing agreements or for free. Free to the user if he is willing to deal with ads or having information ranked by criteria most likely unknown to him. Regardless of the cost however information architecture plays an increasingly important role in our lives. We rely on it whether we understand what exactly it is, how it works and who created and/or owns it or not.

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[1] http://www.tmcnet.com/tmcnet/columns/tracey032200.htm
[2] http://www.wipo.int/about-ip/en/overview.html
[3] http://argus-acia.com/white_papers/evaluating_ia.pdf
[4] http://www.infoarch.ai.mit.edu
[5] http://hotwired.lycos.com/webmonkey/design/site_building/tutorials/tutorial1.html
[6] http://www.oclc.org/dewey/about/default.htm
[7] http://www.oclc.org/dewey/ordering/default.htm
[8] http://www.oclc.org/connexion/
[9] http://www.udcc.org/about.htm
[10] http://www.udcc.org/licence.htm
[11] http://www.ukoln.ac.uk/metadata/desire/classification/class_3.htm
[12] http://www.tlcdelivers.com/tlc/crs/lcso0001.htm
[13] http://www.loc.gov/about/reports/index.html
[14] http://lcweb.loc.gov/cds/classweb.html

[15] http://docs.yahoo.com/info/misc/overview.html
[16] http://biz.yahoo.com/e/030801/yhoo10-q.html
[17] http://www.google.com/corporate/today.html
[18] http://www.ukoln.ac.uk/metadata/desire/classification/class_1.htm
[19] Barbara D'Angelo, e-mail message to author, October 30, 2003.