But that Author Moved to a Monastery: Proactively Managing Intellectual Property to Enhance Choice for Distribution in Academic Technology Transfer

Dana Bostrom

Dana Bostrom is director, innovation and industry alliances, at Portland State University in Oregon.

Innovative software with a unique title is disclosed to your office. The list of authors is ten people. Some of those listed are former and current students, and the disclosure mentions that the software was tested against data created by this same team. Now your office must determine who is an author, of which kind of right, where ownership lies, and gain appropriate assignments. Given my experience, this process can take many months, and—in one actual case—my colleague had to express mail assignment documents to a monastery in rural China prior to executing a license. The time it takes to retroactively manage intellectual property rights can discourage authors and potential licensees, such that distribution opportunities are lost.

Complex software, digital media, and portfolios of assets are becoming more common. That DVD, Web site, or software that was developed by a team on campus can have far-reaching impact—as well as users around the world. Thus, the rights within those assets—copyright, trademark, data, and other associated rights—are increasingly being managed by technology transfer professionals. Many universities manage academically and financially successful copyright portfolios. The University of Washington managed several technologies based solely on copyright and trademark, and each amassed more than $10 million in licensing revenue over a six-year period. Gatorade is one of the best-known trademark cases in the world. These are not isolated cases.

We do not have to ignore patent rights and can acknowledge that patent rights are critical to some businesses. However, enterprises are successfully launched and maintained without patent rights—or with patent rights as a smaller component of the value proposi-

tion—every day. Managing technologies, with a broader focus than on patents, can save time and money while still achieving substantial public benefit and income. Managing nonpatent rights can require more advance work to set a distribution strategy, collect intellectual property rights, manage third-party obligations (which can be easier to accrue than working with patent rights), and identify assets that are useful to distribute.

This chapter will focus on managing intellectual property and associated rights to enable distribution of intellectual assets that have a substantial nonpatent basis. It will not discuss the licensing of these rights or creation of a strategy for the distribution of these rights, but rather suggest mechanisms to proactively manage intellectual property rights and expectations such that licensing and distribution of these rights is easier. By managing these rights while they are being created, institutions can focus on choosing distribution channels for the works, rather than tracking down authors to collect rights.

Potential Rights

Trademark Rights

Trademark rights are one of the most powerful rights, given that they may have no expiration date as long as the mark is used with the goods or services. In addition, trademark is more widely understood by the public at large when compared to other intellectual property rights. Research institutions generally have some built-in awareness and knowledge of the importance of trademarks and the management techniques for them, given the official insignia most research institutions carefully manage. Research projects and technologies can also use trademark; names of particular research results, the whole team's name, or a name of a new technology area are all potential trademark names.

While state trademark registration can be sought (in the U.S.), federal registration is often all that is necessary to protect the underlying rights in the marks obtained through use with the goods or services. International trademark registration can also be sought, although the methods to apply for and enforce marks under international law may vary. The most common trademarks from research institutions are words, colors, and designs.

To have value, trademarks should be used consistently and denote a certain level of quality of the goods (or services for a service mark) with which the mark is used. Trademarks, in the U.S., must also be "used" in commerce prior to issuance. Use in commerce appears to be an issue still under debate in the U.S. given educational institutions' concern about when others' trademarks are infringed (and used) by them, but have less concern about the use of new marks created by the institution.

In addition to filing for registration for actual use of the mark, institutions may also file intent-to-use applications in the U.S. to seek federal registration for marks that may not have yet been used at all or may not have yet have been used in commerce. Such use in commerce may later be shown once the mark is used with goods that have been distributed across state lines. There is great flexibility in managing trademarks.

Trademarks can be useful to include in a package of other rights (copyright, patent, etc.) to associate the licensed rights with the licensed products. The research institution can accrue benefit from association with a product that the public values, regardless of any financial gain.

Many institutions shy away from trademark licensing because quality management is required. Research institutions need to devote resources to ensure that, if the research institution is still using the mark, concurrent use by licensee(s) of the mark does not create conflicts or confusion. Resources to achieve this purpose do not often pre-exist in research groups or institutions. In addition, trademark owners must watch for potential infringers of the mark and new registration filings for marks that may be confusingly similar and may require challenges in the U. S. Patent and Trademark Office or in court to avoid decreasing the value of the owners' mark.

Trademark Management Methods

Sometimes researchers are extremely keen to seek trademark rights and protection for descriptive names of every research result from a project ("Collaborative Information Retrieval" or "CharityWeb"). Often these groups have little desire to commercially exploit or use the trademark in commerce; rather the name is seen as a defensive mechanism—a

trophy or asset without value to create relationships or financial return. Since trademarks need to be distinctive (for example, arbitrary, fanciful, or suggestive), descriptive names may not be granted a trademark registration without showing that the mark has acquired distinctiveness (also known as *secondary meaning*) through what is typically extensive use of the mark (usually a minimum of five years) with the goods or services. This concept can be challenging for researchers who are trying to establish an entirely new field or way of thinking about a scientific problem. I encourage researchers to think of compound words (those that are fanciful or coined) rather than relying on the descriptive term alone.

With groups that desire trademarks as a defense, as well as those where there is the potential for distributing results from the research, I usually begin by talking with them about creating and managing identifiers—logos, words, and/or phrases—that would be eligible for trademark registration, but the university has chosen not to submit applications for trademarks. Since, in the U.S., trademark rights and value are acquired through use (i.e., one does not need to register a trademark to accrue rights), I encourage groups to establish and use terms of use for their identifiers. Creating and managing terms of use provides users practice with the activities necessary if the university did register and license a trademark, and it can begin building value in a mark without any expense. Most large corporations have terms that they require others to use when they allow use of their brand name or logo. Terms usually include items such as:

- size and location of the word and/or logo in comparison to other items on the same page, product, etc.
- color of the word and/or logo
- quality standards of the product, event, etc., being promoted

These corporate guidelines can be examined to create a template that researchers must complete. Gaining an assignment from the trademark creator(s) is also important.

With terms of use established and either a trademark registration application filed or a plan for a future application, a strategy for managing infringement is appropriate. Law firms and search engines are able to set alerts for possibly competing marks, but someone must be tasked with learning more about the potentially infringing use and bringing

in legal counsel when necessary. If a trademark registration is filed, the owner should consider whether the registration is competing and should be opposed so that the value of the original mark is not diminished. If the mark becomes the common name for the product or service, the mark may become generic and, thus, no longer provide trademark rights in it. This has happened with *aspirin*, *cellophane*, and *escalator*, as well as many other terms.

The Bottom Line

1. Technology transfer professionals must seek assignment from trademark creators—but must make sure the assignment is for something that would be eligible for trademark registration.
2. Applications for registered marks or intent-to-use applications may be filed, but do not need to be filed.
3. Terms of use must be established to create and maintain value.
4. Someone must be charged with assuring compliance to the terms of use and scout for potentially infringing marks and competing registrations of marks.

Copyright

In the United States, copyright happens when someone creates any copyrightable work and places it in fixed form. Copyright in research institutions is most usually associated with scholarly works such as journal articles. However, copyright attaches to almost all written works at a research institution, as well as works of music, art, computer programs (software), etc. Copyright also has an extremely long life, of approximately one hundred (or more) years, and its rights can be divided up and licensed separately.

Copyright is a bundle of at least five rights: copying a work, modifying the work (commonly known as *creating a derivative work*), distributing the work, performing the work, and displaying the work publicly. For example, modification rights can be granted, but without granting rights to distribute the modified work.

The most common copyrighted items that a technology transfer manager will see are software, digital media, Web sites, curricula, assessment tools, and technical information.

While all of these have special opportunities and problems, I will generally review copyright of these here. Open source software management and digital media have extremely complex issues that could emerge, depending on how much pre-existing material the researchers use in the new works.

Copyright can be registered in the U.S. with the Library of Congress. Registration is extremely inexpensive and allows one to sue others for infringing upon the registered work, provides a review of whether notice affixed to the work is correct, and allows for recovery of statutory damages and attorneys for infringement occurring after registration. Registration can be difficult, though, if one has to seek information about the appropriate authors who should be listed on the copyright registration application.

Copyright Management Methods

Because U.S. law says that copyright ownership normally accrues to authors and not to their supervisors, it is too often the case that students who wrote a curriculum, took a photograph, designed a logo, or wrote software and have left the research institution must be tracked down to assure that the institution does obtain ownership in the work. Because each institution's policies vary, identifying where ownership lies in all generic cases is not possible in a chapter such as this.

In addition, employer-employee relationships and contract law may impact what works can be deemed works for hire, which is what most companies use to automatically achieve ownership of works their employees create (with the company becoming, in effect, the author). Conversely, if a work is created by an outside contractor, there is normally no work for hire except under very limited circumstances. Research institutions often have as a default that employees own copyright, but must assign it to the institution under particular circumstances. One of the most difficult tasks for technology transfer professionals managing copyright is clearing title, as research is extremely collaborative and the legal definition of *author* is different from how scholars work with each other, and, thus, different from how scholars talk about their colleagues' contributions.

Given the distinctions between corporate and research management of copyright, I recommend managing copyright, in particular, as proactively as possible. Because copyright happens instantly but it can take numerous copyrightable instances to create something appropriate for broad public distribution, authors should be informed of the expectations for work creation, rights consolidation, and distribution so that there are fewer problems once authors are asked to assign work or authors see their names associated with a public use of a work to which they contributed.

Managing expectations of research team members can be handled in a number of different ways. I have used several customizable forms to help research leaders identify their expectations, formalize them, and share them with other team members. I have found two types of documents to be helpful:

- *Information about local policy and laws:* While institution policy and relevant state and federal laws are accessible to potential authors, it is unlikely that the authors have read them, understood them, or believe that they apply to them. A simple list, reference, or recitation of some of the key points is useful to ensure that everyone is on the same page with regard to what can and cannot be done within the relevant policy and law framework. This document is created by the technology transfer professional. Depending on the institution's policy, this document may allow advance assignment of rights or a promise or notice that assignment of rights will be required at some point.

- *Information about the local conditions of the research team:* What has the team decided to do about distributing and/or sharing work from the project? I ask groups to consider who can share work created by the team, when, and with whom. For example, can students use related work in class projects? Can individual contributors publish their portions or does one need to wait for the entire item to be complete? The technology transfer professional can provide a template, with the choices that would be allowed under policy enabled, but the unique content of this kind of a document should be designed by the research team.

With these kinds of documents in place, members are aware of what the grand plan is for the work they are creating. Making the principal investigators aware of the challenges of copyright can make seeking assignment when works are created or prior to someone's departure from the institution easier. I encourage researchers to put these two documents in place as soon as possible after the research team is in place, but certainly when external funding to support the work is in place. A documentation of these informal expectations and what works are planned to be shared (and with whom, when) helps make sure that all project participants share the same understandings.

The Bottom Line

1. Copyright happens automatically when the work is created, and rights can be distributed across numerous individuals. This can be challenging if the research team wants to distribute a work (such as software) that was developed over a number of years.
2. Rather than tracking down authors across the globe several years after departure from the institution, proactively managing the author's expectations for how his or her work will be used and gaining assignment prior to departure, makes everyone more comfortable with the plan for sharing copyrightable works.
3. Most complications arise when research-institution employees create copyrightable works. However, relationships with vendors (or other third parties) hired to work on particular components must also be managed to assure the research institution appropriate rights to achieve the purposes of the work.

Data Rights

Few institutions have specific data rights policies, and there are as many definitions of data as there are data creators. Granting organizations sometimes ask for rights, institutions and authors sometimes each believe that they own data, and data are unevenly covered by statutory methods in the U.S. Foreign jurisdictions sometimes have better mechanisms for managing data than the U.S.

Data are most commonly shared within databases, and the database as a whole is usually managed by copyright and contract. Data and databases can have a variety of uses: experimental results, data to validate against, disparate data made easy to search through a structured system, patterns to look for, historical data, etc.

Data Rights Management Methods

Data can be created by individuals or machines, and the structure of the data has the same options. Research teams that are planning to create data and/or databases could use methods similar to those mentioned in the copyright section. Care should be taken to assess where any non-original data are from to avoid questions about ownership. Data generated by machine may have special concerns if they involve use of other copyrighted information, and parties should be cautious if they use spider, search, or compilation techniques that are legally defensible given the final purpose of the data. Technology transfer professionals may need to examine trespass laws, copyright laws governing circumvention of protection measures, or related laws.

Other Rights

Privacy and Publicity

Laws managing an individual's privacy, use of name, likeness, voice, and signature vary by state. More than fifteen U.S. states have laws that regulate privacy—other states have common-law rights, as well as both statutory and common-law rights. Technology transfer professionals should be concerned about privacy and publicity law when using information, pictures, or other regulated assets about technology the institution promotes. The developer's names and likenesses are the most obvious instances of personal information, but photographs of others embedded in a work may also need to be reviewed. Factual information can certainly be used, but technology transfer professionals should consider if additional permissions are required when using assets other than factual information.

Privacy also impacts the use of data that a research team collects, especially if the data are about individuals or from a Web site. Other laws, if the data involve medical patients or minors, may need to be examined. Some research teams construct a privacy policy to let users know how data will be collected, managed, and shared.

Conclusion

This chapter briefly reviews issues technology transfer professionals should consider in copyright, trademark, data, and other related rights and focuses on how to manage rights

proactively to avoid ownership disputes or title clearance issues at the time of licensing. Closely tied to intellectual property rights is revenue management, which can be contentious with numerous authors contributing to a common work over a long period of time.

Technology transfer professionals are often caught managing ownership disputes of copyrightable works, when the concerns of the authors are more often about how revenue, credit, or other elements will be distributed. Providing research teams a mechanism to discuss these issues, document them, and develop a plan to distribute their work will allow a research institution to more easily share their work to achieve public impact while minimizing risk.