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Practical Tips for Protecting Software Innovations

BY TODD BASILE

The software industry is innovating at a rapid pace. Products are hosted in the cloud and offered under subscription licensing models. Development is collaborative and products increasingly include open source software. Personal data is collected to provide customized user experiences. Artificial intelligence promises to revolutionize the way we utilize big data.

As the industry evolves, many software companies grapple with how to best protect their innovations in an increasingly complex and competitive environment. Fortunately, there are practical ways software companies can protect their valuable innovations, particularly through the use of various contractual and intellectual property protections.

Contractual Protections

Software companies interact with developers, customers, end-users, and other parties throughout the development and commercialization of software products. With so many parties involved, contracts can be particularly effective tools for mitigating risks associated with each relationship.

One important issue to address in each relationship is ownership. Ownership disputes often arise when software is developed collaboratively, with persons internal and external to the company playing a role. Companies increasingly outsource development to contractors and adopt customer suggestions for new features and functionality. It may seem natural that the company would own the resulting code and intellectual property, but disputes often arise if ownership rights are not clearly documented. Accordingly, agreements with employees, developers, customers, and end users should each include assignment provisions conveying any ownership rights these parties may have to the company.

Smart companies also use contracts to control development and use of their software. Well-drafted development agreements set forth detailed specifications, performance requirements, milestones, payment schedules, and other criteria intended to keep the project on track, as well as any constraints the company may wish to place on the developer's use of the deliverables with other clients. Development agreements should provide strict guidelines if open source software (OSS) will be included in the deliverables since some OSS is subject to copyleft licensing terms that may force unwitting software companies to publish their source code and/or provide their software for free. Software licenses should define how customers and end-users are permitted to use the software and prohibit activities that may compromise underlying intellectual property such as reverse engineering and allowing unlicensed users to access the software. Likewise, software licenses should provide the company freedom to add/remove/modify features, implement design-arounds to navigate IP infringement claims, and perform maintenance without violating service level warranties.

Companies can also use contracts to proactively address data security and privacy concerns. These topics are front-of-mind for many companies in the wake of several high-profile breaches and government regulatory action. Contracts can be used to mitigate the impact of breaches by setting expectations, outlining response protocols, and limiting liability for consequential damages.

Patent and Copyright Protections

Companies can further protect software innovations through patents and copyrights. Unlike contractual protections, which typically require privity to be enforceable against a particular party, patents and copyrights can help protect a company's software innovations from misappropriation by competitors and others with whom the company has no contract.

Generally speaking, patents protect how the software functions and copyrights protect code, libraries, and databases. Patents are particularly useful for protecting functionality that could be easily reverse-engineered or independently developed by another. Patents can also deter prospective customers and others with whom the company may need to share sensitive technical information from misappropriating these innovations. Likewise, copyrights can deter third parties from stealing code and proprietary libraries/databases. Other intellectual property protections such as trade dress and design patents can possibly protect the "look and feel" of user interfaces and other aesthetic elements.

Companies should consult an attorney who is well-versed in software-related technologies to determine which forms of intellectual property protections are available and suited to the company's goals. Many forms of software are not patent-eligible; however, recent USPTO guidance suggests that the pendulum is again swinging in favorable direction for patenting many types of software-related innovations.

Trade Secret Protections

Trade secret protection can be another effective way to protect software innovations. Implementing common sense safeguards and policies can often keep valuable information proprietary to the company. Well-known examples include Google's web search algorithms and the Coca-Cola recipe.

One of the most effective ways to protect trade secrets is restricting access to a "need-to-know" basis. For example, companies may configure their IT systems to allow only developers to access source code, thereby reducing the chances that a salesperson might share copies with potential customers or with a competitor when changing jobs. Many IT systems can be configured to alert management to suspicious activity and thereby give companies an opportunity to intervene. Another effective way to safeguard software-related trade secrets is to provide customers and authorized third parties with access only to APIs and executables, rather than the underlying source code, libraries, and databases where the "secret sauce" typically resides. **HN**

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