

When Failure Becomes An Asset

December 16, 2017 by James Pooley

“Failure is success if we learn from it.”

-- Malcolm Forbes

A light bulb turns on

When Thomas Edison was asked about his years of searching for a long-lasting light bulb filament, he said, “I haven’t failed; I’ve just found ten thousand ways that won’t work.” Experimenting with materials ranging from platinum to beard hair, he eventually zeroed in on carbonized thread, and later, bamboo. At that point, he had two important trade secrets. The first, obviously, was the identity of the best material. But the second was the identity of all the others he had tried. Why should that collection of failures qualify as a trade secret? Because any would-be competitor would love to avoid having to put in the effort and take the risk that Edison did.

This same notion – that information about what doesn’t work, or works less well, is valuable and protectable – applies equally to modern research-based industries like pharmaceuticals and biotech, where thousands or even millions of compounds may be tested in order to arrive at a successful new drug or treatment.

The law didn’t always treat R&D with the same respect as its outputs. Back in Edison’s day, trade secrets were limited to information that was “in continuous use” in a business. If you wanted to protect the records of how you got there, you had to keep them locked up. (Edison was obsessive about keeping people out of his lab.) But by the middle of the twentieth century, just in time for the information economy, rules on trade secrets had relaxed, so that even data with “potential value” could be protected.

Let’s go “negative”

In the old days, a lot of confidential information was said not to “rise to the level of a trade secret.” Now, although we still occasionally see this phrase, it’s become virtually meaningless, since the bar is so low: any information qualifies as a trade secret if it’s not generally known and has even the slightest competitive value.

And this is how we get to include so-called “negative know-how” in the asset base of modern enterprises. The trial-and-error method of innovation produces lots of trials and lots of errors, and often requires enormous and risky investments. The ultimately successful product is only the very small tip of a large R&D iceberg.

For the law, dealing with negative data isn’t easy. It can be confused with an employee’s personal skill, which is not protectable as a trade secret. When a dispute goes to court, judges want the secrets specifically defined, and they can get frustrated when referred to gigabytes of experimental data. But this is the reality of developing complex products, where proving that a particular compound or technique doesn’t work can itself be a valuable breakthrough.

Negative information is most commonly put at risk not by theft of the records of R&D, but by departing employees who are familiar with how a particular technical solution was created or optimized. Eager to help their new colleagues, a recent arrival may wince at a suggested development path and blurt out a warning not to go there. Even very general pointers about an engineering direction to try or to avoid can help a competitor reduce risk and shorten development time. That is why hiring someone who has worked on a similar project for a competitor can lead to trouble. (See my recent newsletter [The Most Dangerous Hire.](#))

Influence is all you need

Closely related to the concept of “negative information” is the idea that you can be guilty of trade secret theft even though your product looks very different, or you made significant investments in your own research. When a company’s work is informed by a competitor’s proprietary R&D, the courts refer to this as indirect misappropriation, using labels like “springboard,” “cornerstone,” or “accelerant” to describe the unfair advantage. In effect, it is enough if information from the first project substantially influences the second.

Proving indirect misappropriation can be a challenge, especially where there is no trail of purloined documents to link the accused derivative work to the original. But even in cases where the information has traveled in the mind of a departing employee, you can sometimes demonstrate an

anomaly in the records of the second company's development. The absence of experiments or research behind an important engineering decision, particularly if coincident with hiring from a competitor, might be an indication that someone directed the choice because they already knew what way to go (or not to go).

For companies that want to compete fairly and avoid litigation, this area can be difficult to manage. There are very few hermetically sealed industrial labs where no one has worked for a competitor. And the problem is particularly acute in fast-growing organizations, or where the industry relies on a rapidly mobile workforce. But in this as in other areas of trade secret loss or contamination, those who pay attention and manage to reduce risks are way ahead of the game.

www.pooley.com