

THE ECONOMIC VALUATION OF TRADE SECRET ASSETS

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The economic valuation of trade secret assets has perplexed the intellectual property bar for years. The economic and legal issues are seemingly inextricably intertwined. We present here a method for valuation of trade secret assets that decouples the economic and legal issues, rendering the problem tractable.

Several accepted methods exist for the valuation of a property. Depreciated cost, replacement cost, fair market value, and net present value of future cash flows are all proper measures in specific circumstances.

For intellectual property, however, depreciated cost is not appropriate. The direct acquisition cost of intellectual property may be insignificant, as when the intellectual property results from a flash of insight. However, that same insight may result from the sudden emergence of an idea after years of study in the field and years of experimentation in the laboratory. Which, then, is the true cost, the negligible cost of a moment's insight or the sum total cost of the education and experience of a lifetime?

Similarly, replacement cost is problematic. How does one replace a flash of insight? By what means can one predict the machinery of invention? For patents, trademarks, and copyrights, injunctive relief is true replacement, that is, the restoration of the exclusive use of the intellectual property. But trade secrets, once lost in the public domain, are lost forever. The bell cannot be unring. How then can a replacement cost even be conceptualized, much less determined?

As for fair market value, there may be no marketplace for the intellectual property in question. An advance in the method of manufacturing a proprietary product, a unique corporate organizational structure or compensation plan, negative know-how, that is, knowledge about what doesn't work—none of these intellectual properties

has a marketplace from which a fair market value may be obtained.

What we are left with, then, for trade secrets is the *net present value of future cash flows*. This is a particularly appropriate measure for trade secrets because the very essence of a trade secret anticipates future cash flows. A trade secret is any information not generally known in the trade, which the owner has made appropriate efforts to keep secret and which confers a *competitive advantage* from being kept secret. The net present value of future cash flows resulting from that competitive advantage is an appropriate method for placing a dollar amount on the current value of a trade secret asset.

THE NET PRESENT VALUE OF FUTURE CASH FLOWS METHOD

Net present value of a future cash flow requires an evaluation of three factors:

1. The total amount of future cash flow,
2. The discounted basis of that future cash flow as a present value, and
3. The probability of the future cash flow occurring.

If values can be assigned to these three factors, then the economic value of a trade secret can be calculated by multiplying these three factors together.

The total amount of the future cash flow is the total amount of income over time that will be derived from keeping the information secret as compared to the expected income over time if the information was in the public domain. This is analogous to the valuation of patents, where the economic value of the patent is the value of the exclusive use of the invention as compared to the situation in which the invention is available for use by all.

It may be legitimately asked whether there isn't a broader altruistic value in discovering new knowledge for the use of all, to the benefit of everyone. There is such value, but it is not economic value, that is, it is not a value on which a price can be put, such as in the sale or license of a technology. No one will pay for the use of public domain knowledge, and so the fair market value of such knowledge is zero.

Note that there may be more than one legitimate possessor of a trade secret in the marketplace. Calculation of the net present value of trade secrets is much easier if the trade secret is an invention not known at all in the trade. Since in practice it is impossible to determine whether one's competitors already have legitimate possession of the same information and are also holding it as a trade secret, the simple calculation of value comparing the situations of exclusive possession to public domain exposure is appropriate.

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Misappropriation creates another possessor of the trade secret without the trade secret owner's authorization or consent. Under these circumstances, the damages evaluation compares the pre-misappropriation market to the post-misappropriation market, and the plaintiff can obtain its lost profits and disgorgement of the misappropriator's ill-gotten gains to the extent not already taken into consideration in calculating the trade secret owner's losses. If other competitors remain ignorant of the information, the damages so calculated will be some portion of the total value calculated when comparing the situations of exclusive possession to public domain exposure.

The second factor in the trade secret valuation model, the discounted basis of a future cash flow, is that percentage of the future cash flow that must be invested now as principal to realize the calculated future cash flows over the expected life cycle of the trade secret. This is a traditional accounting method for the calculation of the present value of a future income stream.

The last factor in the trade secret valuation model is the probability of future cash flows derived from the trade secret asset, which can be calculated by evaluating and determining the probability of prevailing in a civil lawsuit to defend the trade secret asset. This has been the critical barrier preventing the economic valuation of trade secret assets because it has been widely held that the probability of prevailing in a future litigation cannot be calculated. The authors disagree with this general consensus.

A trade secret can be validated only in litigation. Until there is a judgment entered in a civil lawsuit that the plaintiff possesses a trade secret, there is no legal trade secret status. In contrast, there is a presumption of validity when patent, copyright, and trademark certificates are issued by the United States government. An official certificate defines the specific intellectual property right that exists.

TRADE SECRETS IN LITIGATION

Trade secrets, however, remain inchoate and subject to the vagaries of the litigation process. The burden of proof is on the trade secret owner to show the existence of a trade secret as plaintiff in a misappropriation lawsuit. The plaintiff cannot rely on presumptions flowing from a prior *ex parte* examination by the federal government.

There are four proofs required to prevail on an assertion of trade secret protected status in court:

1. Existence. The information must qualify as a trade secret asset.
2. Ownership. The plaintiff must be able to prove ownership of the information.
3. Access. The plaintiff must prove the defendant had

access to the information, that is, that the defendant did not independently re-invent the trade secret.

4. Notice. There must be actual, implied or constructive notice of the trade secret status of the information prior to the misappropriation.

Failure of any of these four essential proofs puts the trade secret assets at risk.

The identification of the *res* is critical to proving existence in trade secret litigation. What is "it" that is alleged to be a trade secret? Any information, technical or non-technical, can qualify under the modern definition of a trade secret if the information is not generally known in the trade, there have been appropriate steps taken to protect the secrecy of the information, and there is an actual competitive advantage derived from the secrecy of the information.

These inquiries inevitably require a careful consideration of the following six factors derived from the original definition of a trade secret in the United States in § 757 of the First Restatement of Torts:

1. The extent to which the information is known by outsiders;
2. The extent to which the information is known by insiders;
3. The measures taken to guard the secrecy of the information;
4. The value of the information to the information owner's current operations and the value if obtained by competitors;
5. The amount of time, effort, and money expended to obtain the information; and
6. The ease or difficulty of reverse engineering the information.

All six factors need not be present. However, the six factors will be considered by the trier of fact, and the probability of the existence or non-existence of a trade secret can only be determined after all the six factors have been evaluated and considered.¹

In litigation, the defendant will dispute all six factors and further argue (1) that the information is generally known in the trade, (2) that it was not reasonably protected, and (3) that it confers no competitive advantage. Plaintiff need not prevail on all six factors, but the plaintiff *must prevail* on the three essential elements of the modern definition of a trade secret outlined earlier. Failure of proof on any one of these essential elements will invalidate the existence of a trade secret.

With regard to the first prong of the modern definition, not generally known in the trade, experience in trade secret misappropriation cases has shown that an "everyone knows it" defense does not prevail absent evidentiary substantiation. The defendant must come forward with

evidence from industry publications or present evidence from persons skilled in the art to convince the trier of fact that the information is generally known and used by the other competitors in the marketplace.

The second prong of the modern definition causes the most trouble in real situations. What are appropriate measures to protect the trade secret? The test is defined as relative secrecy, not absolute secrecy. Measures approaching absolute secrecy would prevent exploitation of the trade secret to obtain the resulting economic advantage. Relative secrecy means taking reasonable measures under the circumstances. For example, if a company has already suffered a computer theft of trade secrets, the courts expect a higher level of security in the face of this established and known threat. Courts also apply a sliding-scale analysis to corporations based on size. Larger corporations are expected to have more sophisticated trade secret protection measures than a mom-and-pop business.

The burden of establishing reasonable security measures rests upon the plaintiff. Security measures help the courts define what "it" is that is being protected as a trade secret. For example, if a lockbox is the security measure, then the contents of the lockbox must be the trade secrets. Second, reasonable security measures establish the property interests in the trade secret. Stated differently, why should the courts protect the alleged trade secret if the plaintiff has failed to protect it? The standard of care in the industry comes into play with respect to this prong. Courts will look to the security measures of other competitors in the industry to determine whether the plaintiff has executed the requisite amount of reasonable care.

Finally, the third prong of the definition requires competitive advantage, that is to say, an economic advantage. This advantage can take the form of increased revenues or profits for the owner of the information, but it can also take the form of a reduced ability of other firms to compete effectively against the owner of the information. That is, either the trade secret owner's competitive position is enhanced by the possession of the information or the competitors' position is diminished by lack of knowledge of the information. Trade secrets also deter entry of new market entrants who must spend the time, effort, and money, go down all the blind alleys, and engage in all the trial and error necessary to compete against the existing competitors in the market.

The second required proof, ownership, has been implied but has not often been litigated, probably because the word "ownership" is not expressly included in the definition. However, it is critical that the possessor of a trade secret have ownership or be a licensee of the owner. The intellectual property laws in the United States protect

the creator with few exceptions (*e.g.*, the work-for-hire doctrine in the copyright statute), and the plaintiff must show ownership of the trade secret. Absent an employee-assignment clause in a valid and enforceable employment contract, the result in litigation may be that a trade secret does in fact exist, but it was created and is owned by the employee. The company may retain no more than a shop right to practice the inventions embodied in the trade secret because it was created with company tools on company time.

Access is an important proof to secure the plaintiff's trade secret rights. There is no monopoly right in trade secrets. If the defendant can show that the trade secret was independently developed without access or use of the plaintiff's information, then the defendant has the right to practice the inventions or improvements embodied in the trade secret. Trade secret protection can be extended only to prevent actions by employees or third parties that obtain access to the information in confidence and breach that obligation of confidentiality.

Finally, notice of the trade secret status of the information is necessary. The courts will imply constructive notice in a principal-agency relationship under certain circumstances. With respect to third parties, however, failure to provide notice and to obtain an agreement to maintain the information as confidential *before* actual disclosure may result in forfeiture and therefore be fatal to the trade secret claim. This is why nondisclosure agreements (NDAs) and confidential disclosure agreements (CDAs) must be executed before third-party disclosures. Although a writing is not required to establish notice, it is clearly preferred to the conflicting testimony of witnesses in a subsequent court hearing.

Notice can take the form of "confidential and proprietary" labels on sensitive documents, a high-level description of the trade secrets on a trade secret exit interview form, or password-protected access on a computer. The failure to mark a document as confidential is not fatal, however, if it can be independently established that the recipient knew or had reason to know that the information was confidential and that the recipient was not authorized to take and use the information for his own benefit or the benefit of others without the trade secret owner's consent.

It is important to note that this required notice cannot take the lackadaisical form that "everything we do is a trade secret." A failure to differentiate the trade secret information from the public domain information within the company places all information in the same class. Companies have found that, when they claim that "everything" is a trade secret, the courts conclude that "nothing" is a trade secret. There is no substitute for the

specific identification and protection of trade secret assets by a company.

Where does all this leave us with regard to the economic valuation of a trade secret? There are two important observations to make at this point.

First, the **total value** of all the potential trade secret information of a company that has failed to meet the evidentiary criteria outlined above should be set at *exactly zero*. There is no inherent right to obtain trade secret status in information absent proper stewardship, and, absent such stewardship, the probability of prevailing on the merits in future litigation alleging trade secret status for the information approaches zero.

Second, the valuation of a trade secret is not confined to the value of the information content *per se*. *The valuation of a trade secret asset is a function of both the content of the trade secret information and the stewardship and protection of the trade secret asset.*

This fundamental principle of trade secret asset valuation presents good news and bad news scenarios to corporations faced with the task of performing an economic valuation of their trade secret assets.

It is certainly bad news to the well-meaning but poorly prepared client, after the misappropriation, on the brink of litigation, that its suit has little chance of success due to poor stewardship. The good news is that the implementation of procedures for the proper stewardship and protection of trade secrets *before misappropriation* can both ensure and increase the economic value of those assets.

CASE STUDY

We present the following case study to illustrate these principles. As trade secret cases are by definition very sensitive, this case study is necessarily hypothetical. We have combined certain common issues that we have seen in actual cases in order to construct a likely scenario.

In our example, the owner of a closely held company has contacted you to perform an economic valuation of its trade secret portfolio. You perform an initial investigation and find that:

1. There is no inventory of the alleged trade secrets.
2. There are no employee agreements beyond the statutory fiduciary obligations.
3. There are no contractor or visitor agreements.
4. Alleged trade secret information is not secured in locked file cabinets, and such information is often left out in the open on company desks in unlocked offices.
5. Alleged trade secret information is stored on personal

computers on which login protections have not been implemented.

6. Documents containing potential trade secrets are not stamped or labeled confidential or proprietary.
7. There is no secure method for destroying confidential documents.
8. No method is in place to track the time, effort, and money expended in creating and developing the alleged trade secret information.
9. Employee, contractor, and visitor badges are not required.
10. There is no security at the front door.
11. The manufacturing processes are not hidden from public view.
12. Temporary workers are often hired during peak periods and exposed to the alleged trade secrets.
13. There is no policy handbook on trade secrets, and no training in trade secret handling procedures for employees.
14. There are no trade secret exit interviews of departing employees.

You inform the business owner that the valuation of his trade secrets has been performed, at far less expense than he had hoped. That's the good news. The bad news is that the economic value of his trade secret information is exactly zero. While the content may or may not have economic value from not being generally known in the trade, there is little probability that the company can or will prevail in litigation. Why should the courts protect information that the company itself has not protected? The company risks forfeiture of its trade secret rights to anyone exposed to such information who can then legally appropriate them for his or her own benefit.

The owner of the company is appalled by the results of your valuation study, shared in confidence with the client. How can this information, developed over many years at great expense, have an economic value of zero? The answer is clear. There is no inherent right or title to trade secrets absent proper stewardship. There is undoubtedly information that provides an economic advantage, but the company has voluntarily exposed it to the world without restriction, and any trade secret rights in this information are at immediate risk of forfeiture.

The case law is replete with examples of this hypothetical. Many information owners find out when it is too late that the courts will not protect their information assets as trade secrets because the company has taken inadequate measures to protect such information, or a forfeiture of any trade secret rights in such information has occurred. Information is either a trade secret or not a trade secret. Absent a patent, if the information is not a trade

