Assessing the Probabilities of Obtaining a License

I never met an inventor who didn't want to know the value of his inventions. Accounting rules allow intangible assets to be recorded on balance sheets at their 'highest and best uses'. The highest and best use of inventions is typically to license the invention to a company capable of delivering products that incorporate the invention to the market. Licensing typically yields a higher value than using related patents to ensure freedom of operation, blocking competitors, or removing a technology from the market in order to eliminate the risks of displacing successful products.

There are a host of valuation tools—such as the Discounted Cash Flow, Relief from Royalty, Decision Trees, Probability Weighted Expected Return Methods—that we use to determine the value of inventions and patents once licensing occurs. All of these valuation methodologies require an assessment of the probability of securing a license.

To make this determination we have developed a Licensing Probability Model (LPM). LPM is a dynamic model that produces different probabilities of securing a license as new information is fed into it.

The three major components of the LPM are Expected Financial Returns, Deal Congruity and Deal Momentum. Below is a brief review of these components.

EXPECTED FINANCIAL RETURNS – The biggest impetus for a licensee to license in an invention is the expected financial returns. A quick formula for estimating these expected returns is:

- Expected Financial Returns = Market Potential + Strategic Motivation – Upfront Costs – Risks of Implementation

The vast majority of the readers of this article are familiar with the terms above. So a remedial review of them is not necessary. However, the important issue in building models is not filling them in by rote process, but rather by asking penetrating questions. As Pablo Picasso said, "Computers are useless. They only give you answers. The question is what is important." Some of the questions that we ask to populate the Expected Financial Returns part of the LPM are:

• **Market Potential** Does demand already exist? Jacob Reinbolt, Partner at Procopio, Cory, Hargreaves & Savitch LLP, points out that technologies that facilitate natural extensions of products into new markets offer high risk-adjusted value. An example of this principle is placing social media applications on smart phones.

• **Strategic Motivation** How badly does the customer need the technology? According to Mark Wicker, Partner at Morrison & Foerster LLP, industries (such as pharmaceuticals) that have enormous revenues at risk, high rates of obsolescence, and few remaining years of patent life will be highly motivated to adopt new technology. On the other hand, industries that face less competition and are considering replacing basic compounds are likely to wait until the government tells them they can no longer use current products before they license in new technology.

• **Upfront Costs** What is the cost of delivering the technology to the market? How long will it take to deliver the technology to the market? Will market demand wane in the meantime?

• **Risks of Implementation** How developed is the technology? The earlier the stage of development, the more pronounced the risk and the lower the value of the technology. Is the technology to be licensed already a product? Is the licensor licensing all of the relevant technology to the licensee? Have searches been conduct to detect how practicing the licensed art might infringe on the patents of others?

• **Risk of Implementation** What has the inventor done to de-risk the invention for the licensee? Measures such as obtaining independent technology validation, a freedom of operation opinion letter, business model validation, or a customer contract reduce the risk for licensees. For cash-strapped inventors, it is most important that the investments to de-risk licensing risks for the licensee demonstrate that the technology offers a direct path to rapid revenue.

DEAL CONGRUITY

Just because a deal appears to be financially rewarding doesn't mean that the deal will be consummated. Inventors must identify specific companies with requisite financial resources to license in their technology. There must be close alignment in the business objectives of the two parties. To determine the extent of the strategic fit that exists between the licensor and potential licensees, we ask questions such as:

• What was the genesis of the invention? Shane Hunter, Partner at Townsend and Townsend and Crew, notes that inventions that solve problems faced by researchers are more likely to be licensed than inventions that come about as a matter of happenstance. For instance, a solution to a problem that has long befuddled legions of researchers will more likely find a licensee than an invention whose inspiration occurred when a lone inventor banged his head on the toilet as he fell to the floor.

• What is the licensee's commitment to commercialize the technology? This answer is a function of the licensee's history of developing licensed-in technology and its history of managing collaborations with licensors. Other issues to consider along these lines include:

- Does the technology serve the licensee's primary or ancillary business units? Are targeted markets natural progressions for the licensees? Are the potential licensees allocating their research dollars to the primary markets to be addressed by the invention? If not, is the reason because of a lack or relevant resources? Are the licensees downsizing in areas of importance for the successful commercialization of the technology?
- Have the licensees committed (or are they likely to commit) their best manufacturing facilities to the project? Best regulatory affairs personnel? Most capable sales and marketing staff to the initiative?
- How receptive is the licensee to license in new technology? The answer to this crucial question is a function of the degree of potential opposition by the licensee's lawyers and the degree of potential opposition by licensee's research and business development professionals to license in technologies.

• Can the licensee's pipeline accommodate the technology? While an invention can offer attractive return on investment potential to a licensee, the licensee will not be willing to license in such invention

if its pipeline is congested. If the pipeline cannot accommodate the technology in the near-term, a very high discount rate must be applied going forward to account for the fact that the odds of achieving a license agreement decline rapidly over time. This is because companies want the latest technology, shelved technology becomes stigmatized and there is significant turnover in the licensing departments of large companies.

DEAL MOMENTUM

In addition to deals penciling out and existence of strategic congruity, the people factors must be in place for deals to close. Among the considerations to review in determining whether the people factors will act as lubricants or irritants are:

• Was the deal brought to the licensee by a respected intermediary? Inventions brought to the attention of licensees by licensing agents, patent brokers or lawyers are often well received by licensees as they have already been vetted to some extent. Also, the agents' familiarity with the licensees' processes raise the probabilities of closing a license.

• The willingness of the inventor to participate in the negotiations is important: The inventor can make the otherwise bland words in a patent come alive. Their excitement for the technology can be infectious. However, in other instances, the inventor is too busy (pursuing other research or has committed to delivering extensive client consultations) to focus on negotiating the licensing agreements at hand.

• Stephen C. Ferruolo, Partner with Goodwin Procter LLP, notes that the reasonableness of the inventor is an important factor in negotiating license agreements. Many inventors have completely unrealistic expectations regarding the value of their inventions. Further, the role of the inventor in contributing to improvements to the technology or in its commercialization is another issue that demands agreement between the inventor and licensee. In some cases, arrangements can be made to have the inventors (or key research people) transfer their employment from the licensor to the licensee.

• Are you negotiating with people that have decision making authority? How high up in the organization has approval been obtained? How high up in the organization must approval be obtained? Is there an internal champion for your project? An interesting method of determining internal alignment is when senior members of the licensee sign off on a Memorandum of Understanding.

• Are negotiations progressing smoothly? The answer to this question is a function of the stability of your negotiating partners, consistency of communication, agreeing on the majority of issues throughout the negotiations, and the potential for future deals between the two parties. Other important indicators are the licensee's willingness to sign off on Non-Disclosure Agreements, Memoranda of Understanding and Term Sheets.

The above discussion obviously does not provide a comprehensive list of issues to take into account when estimating the likelihood of obtaining a license. However, considering the Expected Financial Returns (for the licensees), Deal Congruity, and Deal Momentum should provide a framework for making such assessments.

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