Making the Licensing Decision



Licensing Executives Society
(U.S.A. & Canada)



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INTRODUCTION

Licensing often appears to be a quick and easy alternative to the hard and fitful process of technology development and commercialization— especially for independent inventors and small business owners. Yet licensing is in its own right a demanding and highly-specialized process often involving participants from vastly different backgrounds and organizational cultures. Quick and easy it is not.

On one side of the licensing equation, independent inventors and small businessmen search for partners. In the search, they will interact with people and organizations with which they are unfamiliar; they will encounter new and different languages and expectations; they will experience frequent barriers to communication in expressing what they're after and what they have to offer. Although attracting investors requires a sound business strategy, their strategy is often unclear or unarticulated. They often don't understand the industry in which they are trying to license their technology. They find themselves dealing with people who are driven by unfamiliar imperatives and who live in different cultures. These potential partners require them to provide information (e.g., market information in sufficient quantity, technology management information, production information) which they do not have and don't know how to access.

On the other side of the licensing equation, the firms to which an independent inventor or small business wishes to license tend to deal effectively only with those who understand their imperatives and needs. Larger firms most often are driven by market imperatives instead of technology and are most interested in how technology can contribute to the "bottom line." Further, they are familiar with the licensing process and its requirements and may employ licensing professionals. Unlike the independent operator or inventor, the firm's prospects are not riding on this one deal. They will not necessarily approach partnering as the most important thing they will do this year.

Independent inventors and small businesses find the innovation process[1] challenging—at best. For the purpose of this document, the innovation process is conceived of as a series of technical, market, and organizational development tasks that can be clearly defined, and which must be completed by someone to achieve commercial success (see Table). Only rarely can one person or small firm complete the process. Individuals and small firms must decide which segment of the innovation process they wish to participate in and then determine what kind of partner could best shepherd their product (or process or service) through the remainder of the process and into the marketplace so that all parties benefit financially.

Left unexplained, the differences between smaller and larger firms can constitute a **nearly** insurmountable barrier to licensing. This document contains information needed to understand the process. It attempts a straightforward, clear, and plain English description of the major issues facing independent inventors and small firms: making the decision to license for business reasons, finding a licensee, and negotiating a license. We emphasize identifying what an independent inventor or small business can do best, and obtaining expert assistance to complete those tasks best completed by other professionals. We wish each and every reader success in his or her licensing efforts.

[1] How technology proceeds from product definition (whether a product, process, or service) to full production in one or more markets.

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As always, we remain responsible for the material contained herein. We hope it eases your journey through the licensing process.

Marcia L. Rorke and Kevin Dwyer
Mohawk Research Corporation 1996

TABLE 1: THE INNOVATION PROCESS

RESEARCH STAGE: IDEA TO ENGINEERING APPLICATION

TECHNICAL DEVELOPMENT	MARKET DEVELOPMENT	BUSINESS DEVELOPMENT	SKILLS REQUIRED	PEOPLE INVOLVED
Idea (Basic Research)	Research literature	Basic research funding	Scientific/technical	Principal Investigator
Concept Definition (Applied Research)	Needs analysis	Intellectual property survey	Proposal writing	PI + research team
Proof of Concept	I.D. internal factors I.D. competing R&D	Commercialization planning Define intellectual property strategy I.D. potential partners	Team building Core competencies	PI, research team, Intellectual Property staff Tech Transfer staff
Engineering Applications Analysis	Commercial needs analysis	Research funding; Explore intellectual property options; Refine list of potential partners; Prioritize deployment applications	Applications engineering Industry knowledge	Applied research team

INNOVATION STAGE: PRODUCT DEFINITION TO ENGINEERING PROTOTYPE

Product Definition (Exploratory Development)	Preliminary definition	Decide to develop; Find funding; I.D. product champion	Intuition to technical Technical to engineering	Principal Investigator Project Team
Working Model (Advanced Development)	Market analysis	Find developmental funding	Engineering	Project Team (?) Entrepreneur or corporate product champion Engineers: Production Safety
Engineering Prototype Test Refine (Engineering Development)	Complete industry analysis First formal market analysis and market plan	Funding for advanced development Establish intellectual property protection Formal commercialization planning	Engineering Legal Market Analysis Partnership Development	Project Champion Engineers Patent Attorney Industry partners Market analyst Planners

ENTREPRENEURIAL STAGE: PROTOTYPE TO PRODUCTION

Production Prototype Scale Up Test Refine Production Engineering Product Safety Engineering	Full Market Analysis and Plan Niches Barriers Pricing Competition Cost Data Distribution Method Alternative Product Applications Risk Analysis Sales Projections	Find Big Money Complete Business Plan Form Business Meet State and Federal Regulations Arrange Insurance Price Production Facility	Engineering Production Product Safety Entrepreneurial Financing Marketing Cost Analysis Legal Management	Inventor (?) Entrepreneur Investors Engineers: Production Safety Attorneys: Patent Corporate Accountants Consultants: Marketing, Business Management, Financial Insurance Brokers Trade Union Officers
Limited Production Qualification Testing Running Changes	Contact Customers Commence Distribution Seek Product Endorsements Follow-up Sales Advertise Publish in Technical Journals	Find Big, Big Money Start-up Business Build Plant Buy Equipment Hire Foreman and Labor Arrange: Product Services Purchasing Transportation Record Keeping	All of the Above -PLUS- Systems Engineering Specialty Engineering Sales Analysis Supervisory	All of the Above -PLUS- Foreman Labor Sales People Specialty Engineers Systems Engineers
Full Production Start-up	All of the Above -PLUS- Expand Distribution Analyze Competitor Response	All of the Above -PLUS- Monitor Costs Finance Cash-Flow Deficit Refine Production System	All of the Above -PLUS- Delegation Marketing Forecasting Strategic Planning Long-Term Financial	All of the Above -PLUS- Expanding Management Sales Labor Force
Initial Growth	Increasingly Complex	Increasingly Complex	Increasingly Complex	Increasingly Complex

MANAGERIAL STAGE: PRODUCTION FOR MAJOR MARKET PENETRATION

Product Improvement New Products Sustained Growth	Complexities Intensify	Complex Management	Entrepreneur (?) Fully Bureaucratized Management R&D Staff National Investment Firm

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CHAPTER ONE

WHAT LICENSING IS

Given the tremendous growth in licensing by businesses large and small over the past two decades, the question arises: What can licensing do for you? To answer that question, let us first consider some business fundamentals.

The conduct of business is, in large measure, a search for new opportunities. In the technology business, one searches for such opportunities in new technical capabilities and applications. Varieties of markets exist to provide these capabilities to users in the nearly limitless chain of producers and consumers that define the modern economy. Succeeding in business means succeeding in markets. In the technology business, one succeeds in markets by meeting user needs; that is, by providing users with capabilities they can use to profitable or productive ends. Getting to users requires getting to markets.

Licensing offers a way of getting to existing or new markets more quickly and at less expense. Those with new technologies or products, who lack the resources to make, market, and distribute them may find a way of introducing new technologies and products into markets through licensing. Businesses operating in established markets seeking to expand their product base may likewise acquire these new technologies and products through licensing.

So what is licensing? Simply put, **licensing** is granting the rights to make, use, or sell a proprietary product, process, or service in return for payment. A **license** is the grant of permission or rights, the granting being done by a party that has the right to do so. A **licensing agreement** is the formal embodiment of this arrangement, specifying the parameters of the permission granted—including the territory in which it can be used, the length of time for which permission is granted, and other terms and conditions of use—as well as the amount and schedule of payments to be made. To put it most simply, a licensing agreement is a contract. The devil, of course, lies in the details which we will discuss at greater length in chapter four. For now, let us walk around with the concept and see how licensing can be made to work for you.

Licensing requires at least three things: a product (defined as a product, process, service), a seller (licensor), and a buyer (licensee). The product, process, technology, or service being offered or sought constitutes what the lawyers call the "licensable subject matter." Licensing is a means of exchange whereby one party enters contracts for permission to use a licensable subject matter owned by another. The party granting this permission is called the **licensor**. The buyer in this relationship—the one obtaining permission to use (or make or sell) the product—is the **licensee**.

Licensing presumes ownership of **intellectual property**. As such, licensing requires recognizable forms of intellectual property protection. Patents, trademarks, copyrights, trade secrets, etc., demonstrate ownership rights to inventions, products, services, or technologies. Ownership needs to be demonstrated if someone is going to pay for the right to use intellectual property. Prudent companies will not even talk to potential partners about licensing items not readily identified by such tangible proofs of ownership.

Because licensing requires legally binding agreements about legally protected properties, the process also involves experts. Get good ones. Two types of professionals are generally needed to do licensing: a patent attorney (for intellectual property issues), and a licensing professional (for finding and negotiating with partners). While some patent lawyers can do both jobs well, assume for planning purposes that you will need to hire two professionals. Presume a prospective licensing partner, depending on the size of the business, employs at least two specialists: a patent lawyer and a licensing pro. Ideally, preparing to deploy or acquire technology through licensing will work best when you can assemble a team to manage the process; a licensing team (your resources permitting) will bring technical, marketing, business, and legal expertise to the table. In cases where such experts cannot be assembled, the principal champion of the technology (this very likely means you) will have to pick up the slack and acquire working knowledge of the technical, market, and business considerations that drive licensing activity in the industries where you seek to license.

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LICENSING AS A BUSINESS STATEGY

Licensing is a strategic tool for growing a business. It is used by large and small firms alike. In common usage, when a firm acquires a technology through licensing, it is said to be **licensing in**; when a firm grants permission to use its technology to someone else, it is called **licensing out**. Many firms engage in both forms of licensing. Some firms, although increasingly fewer in number, practice neither.

The words "business strategy" and "strategic" appear frequently in this primer. Let us take a moment to consider what they mean. By **business strategy**, we mean the approach you will take—most usefully embodied in a business plan—to meet your business goals. If you are not accustomed to thinking of your business in terms of strategies and goals, we encourage you to do so. Even if you have a technology and would like to leave the manufacturing, marketing, sales, and distribution to others, you will need to develop a strategy to find a partner. Remember that not just any partner will do; as we will emphasize time and time again, successful business relationships—your ultimate goal in licensing—depend most often on finding appropriate partners. To face the facts, partners (let alone the right partners) will not simply find you. You must find them or at least put yourself in a place where they can find you. Thus, the need to develop a strategy.

Business goals and objectives—for small businesses especially—are likely to be tightly bound to personal goals and objectives. These only further necessitate the need for a well thought-out strategy for your business (whether you decide to license or not). Chapter two will focus closely on the factors comprising the decision to license. But if you are not in the habit of thinking strategically about your business—of thinking how you will relate the means at your disposal to the ends you would like to reach—there is no time like the present to begin. Before we embark on that discussion, though, let us consider a few more general features about licensing that you should bear in mind.

LICENSING IS AN EVOLUTIONARY PROCESS

If you decide to license, understand what you are getting into. The search for a licensing partner requires an escalating need to gather, organize, and analyze information. In the early stages, information will come in small quantities, the sort of stuff you can collect in a shoebox. As you become more practiced in the art of looking for a partner, the information will require sorting and organizing into file folders. As the level of detail of your information and the sophistication of your analysis increase, you will eventually need a filing cabinet—or at least a drawer in which to hang your folders. Welcome this process.

Looking for a licensing partner is like looking for a job. The search can be thought of as a process in which you will need to gather a finite amount of information and make a finite number of contacts before you find the one that works for you. Every notecard collected with information about a business, every meeting held or phone call made and duly recorded and filed is one more step toward the finite number. Remember this at the early stages especially, when your spirits can rise highest and fall lowest depending on the outcomes of a particular day. Again, as with a job search, the main thing is to keep going.

The amount of expert help you will need also evolves. At the beginning of the process, you should consult with a patent attorney to secure appropriate intellectual property protection (if you are a prospective licensor) or to verify intellectual property ownership (if you are a prospective licensee). If your resources permit, you may want to consult with a licensing professional. It can save you an enormous amount of time. Over time, your network of contacts will expand, and, as you approach the deal-making stage, you should have built a team consisting of a patent attorney, a licensing professional, and other consultants hired to help navigate the shoals of particular industries or companies. Resign yourself to this fact early: You will need expert help.

LICENSING MEANS DOING YOUR HOMEWORK

As all of the above very clearly implies, licensing requires that you do your homework. You

will need to collect information on the industry or industries where your technology will most likely be put to use, on the firms in those industries, and on the markets where users in those industries do their buying and selling. If your resources are sufficient and your connections are good, you may be able to find consultants to do your legwork who can obtain the needed information in short order. But few of us are so lucky.

The need to do your homework, like the need to think strategically, is a point about the licensing process that you must accept and embrace. To convince potential partners of the benefits of your technology, product, process, or service, you must speak the language most persuasive to them—the language of *their* busness, *their* industry. If you don't know this language, you'll have to learn it. Learning the language, in time, means learning their business. You will need to know the factors they use to make their decisions to acquire technologies (buying keys), the forces that compel operations in their industry (industry drivers), and the benefits your technology may offer them.

Likewise for prospective licensees. In order to communicate effectively with technical development and intellectual property specialists from whom you seek to acquire technology, you must be able to articulate the capabilities you need, the specific technologies you hope to acquire, and the applications to which you intend to put them. All of this means homework.

In cases where you seek to license in an industry with which you are familiar, the homework task will, of course, be less burdensome. On the other hand, do not limit yourself to familiar industries alone. Multiple applications for your technology may be found in a number of unrelated industries; the same may be true for technical capabilities you seek. Explore your options widely: the more you do, the more opportunities you are likely to find.

COMMON MOTIVATIONS FOR LICENSING

Some small businesses use licensing to very good effect and with a great deal of forethought. Others do not. Below are the five "worst" motivations for licensing, among small businesses in particular:

- Small firms that license their technologies frequently do so to avoid being "in business." Such people and firms want to create innovations, rather than manufacture or sell them. This fairly common motivation does not remove the onus of being "in business" from the licensor, however. Licensing is a business decision and needs to be approached and managed as such—even if the ends sought are to stay out of the business of making and selling technologies and products.

- The desire to move on to other things— be it other projects, other personal pursuits, or even retirement—is another common "negative" motivation for licensing. For many licensors, the thrill is gone after the work of innovation is complete. While such a mind set often views all that comes after as "mere detail," there remain quite a number of details that need to be addressed before a new product or technology gets to market. Realizing the success of getting something new into the hands of users (or any revenue to be derived from it) demands that the technology be licensed to someone who can get it there. Success comes from finding the right partner, and that takes work.

- The empty "cookie jar"—that is, being out of dough—is another common reason why small businesses often turn to licensing as a product development or revenue raising option. Raising the capital required for development is a difficult business in itself. Many small businesses and inventors thus turn to licensing-in a product or technology that fits a need rather than developing one, or they license-out a technology or product rather than continuing to develop it themselves.

- An unpleasant past experience, that is, having tried before and failed at a technology development or product launch— for any one of a hundred different reasons—provides another common motivation for many a small business licensee or licensor. Successful licensing

requires that one try again. While it is an alternative approach to development or venturing, licensing will nonetheless involve contact with business people and conditions—often the same sorts of people and conditions that caused discouragement the last time around.

- A fifth and related defensive motivation for licensing stems from a small businessman's "inferiority complex": the belief that "only the big boys" can play the game of new product acquisition and deployment. This is patently false. Sure big businesses can bring more resources to bear and have teams of expert staff ready to facilitate the process of a commercial acquisition or product launch through licensing. But the business world is replete with examples of small players who found the right partners, made smart deals, and profitably enjoyed successful licensing agreements.

LICENSING STRATEGY

While the motivations for licensing differ from business to business and person to person, the need to go about it strategically does not. Licensing strategically is more than simply licensing opportunistically; it is licensing opportunistically with forethought, licensing that helps your business reach a desired end.

Companies that succeed in licensing employ licensing in a strategic way, as the following examples show. Quabbin Corporation, a small New England steam turbine packing ring manufacturing firm, was looking for ways to expand its product line and grew its business significantly by licensing in new technology. Through an industry contact (in Sweden, as it happened), the president of the firm learned of an industry veteran, also in New England, with an improved packing ring who had unsuccessfully approached the leading packing ring manufacturers about licensing the technology. Upon hearing of the new component, Quabbin pursued a license with the inventor. While unable at first to meet the inventor's price, a licensing agreement was finally signed owing to creative negotiating and a willingness to compromise. The firm brought the inventor on board as a consultant to oversee new product development, meeting the inventor's strategy to keep inventing as well as their own. While not a technology developer, Quabbin used the licensing option to secure what it needed to launch new products into markets—and to meet the objectives of its business.

DuPont Chemical Corporation, on the other hand, which invests heavily in research and development activities, uses licensing primarily as a means for increasing revenue. This practice derives from their corporate strategy—which is to focus on specific competencies and maintain industry leadership in those areas. When the laboratory folk come up with novel chemical compounds that do not fit with the core competencies of the company's businesses, DuPont will license out such inventions to interested parties. The company's strategic direction is focused. The intellectual property governing new materials with commercially useful properties gets licensed out, DuPont saves itself the distraction of developing something tangential to its business strategy, and—not least—the company collects royalties on the success of the licensed process, technology, or product.

In other cases, technology developers decide to simply sell the patent. Take the case of an independent inventor who decided that it was time to let go of his technology. The invention was novel enough that the prospective buyer (a real entrepreneur with an engineering background) had to seek expert technical assistance to determine its viability. With viability affirmed, the entrepreneur did his market research, contacted potential buyers, and actually obtained orders for the technology. The inventor (who asserted that the technology was absolutely ready to be manufactured) wanted to simply sell the patent and drawings for a price equal to the cost of a boat he wanted. They made a deal, signed the papers, exchanged the intellectual property and the entrepreneur left to begin setting up a manufacturing facility. The entrepreneur (a professional production engineer) nearly passed out when he saw the drawings that were delivered—they were only sketches! What can be learned from this case? For one, it shows that pricing can sometimes be determined for very personal reasons having nothing to do with quantitative results of predetermined formula. The case also illustrates that "stage of development" is often in

the eye of the beholder. What an inventor believed to be production-ready was, in a production engineer's world, nine months away from being manufacturable. The case offers a vivid example of the need to ensure that all parties are "speaking the same language." In the final analysis, the price was set and met, and the technology was licensed.

Each of these examples shows that licensing can be pursued for a variety of reasons to fit a variety of scenarios. Their common point is that success in exercising the licensing option is more likely when licensing is used to meet a specifically determined end. So before you enter into a search for a partner, know what you intend to use licensing to achieve.

CHAPTER TWO

DECIDING TO LICENSE

Contemporary business is replete with examples of the multiple uses of licensing. Some firms will use licensing as a defensive mechanism, to gain control of a technology or product that may provide an uncomfortably strong measure of competition in a market where they are comfortably situated. Such a firm may pay you handsomely for an exclusive license to control your invention, and then bury it to prevent its ever coming to market. Be creative, and expect your potential partners to be.

Making the decision to license demands answering a fundamental question: "Is it worth it?" Answering that question fully and well requires that you consider several scenarios, and that you stay mindful of the goals and objectives—both personal and professional—you hope to achieve. This chapter discusses the factors you should consider in making a decision to license.

DECISION FACTORS

Several factors are likely to affect your decision to license or not to license as a business option: strategy, capital needs, and core competencies and technologies. These are discussed below.

STRATEGY

What are your business goals and how can licensing help you achieve them? These are the strategic questions which will determine whether a licensing deal will work for you. In the examples given of licensing strategically, Quabbin set a goal of expanding its product line—to secure new markets, spur company growth, and secure a better position in the steam turbine packing ring industry. The company had choices about how to achieve this goal. One, it could have established a research and development capability in-house. But the company was in the service and manufacturing end of the business, not the research end. By licensing strategically, Quabbin acquired the new product it needed but lacked the capability to develop. The deal helped the company meet its goal of product-line expansion more quickly and with much less expense than by developing an in-house R&D capability. DuPont, on the other hand, licensed out technology that did not fit its strategy of maintaining industry leadership in its principle competencies, thereby generating a revenue stream for the company while maintaining strategic focus. Our independent inventor's strategy was to make enough money from his innovation to get a new boat. With the sale of his patent, he did just that. In all of these cases, the company's business strategy drove its licensing strategy.

CAPITAL NEEDS

Capital needs are frequently a primary factor in the decision to license. While licensing can offer access to cash, it is infrequently a means for getting rich quick. Superior technologies may generate more revenue, but it is far from prudent—although altogether too common, especially among those new to the licensing business—to think that one deal is going to provide revenues sufficient to keep the company awash in cash (when licensing out) or the one killer application that will establish a firm as an industry leader (when licensing in). As in other matters of finance, prudence should remain the watchword in calculating the impact of licensing on the capital position of a business.

Expectations of the value of licensing need to be realistic. Licensors in most cases will not get all that they are seeking in terms of royalties, and licensees will probably wind up paying more in royalties than they intended. The general rule of thumb about licensing is that 25-33% of the licensed subject matter's value goes to the licensor, although there is some variance from industry to industry. The price of a license generally takes several other particular factors into consideration. These include:

- Value to the customer
- Dynamics of the marketplace
- Competitive situation
- Financial forecasts
- Impact in the marketplace

While you will seldom get rich quick by licensing, licensing agreements can be used very effectively to add a measure of stability and predictability to the cash flow of a business. A research

and/or development business, for example, may license out several technologies it has neither the desire nor expertise to manufacture, thus generating a reasonably predictable revenue stream that helps to stabilize cash flow. A manufacturing company in a seasonal industry, on the other hand, may penetrate new markets with licensed technology, generating revenues that help ease the crunch of the slower season in its principal business. These are very straightforward scenarios which illustrate the basic point. Business life, of course, can be more complex. Take the case of the research and development company that derives the bulk of its revenues through licensing products combining several component technologies, some of which it owns, and some of which it does not. In such a case, the firm pays royalties to licensors whose technologies it needs to develop products. The firm, in turn, licenses these to a manufacturer. Such a firm is engaged as both licensee and licensor in its business as a technology developer—a fairly common scenario in higher technology industries. In such cases, R&D funding is exchanged for licensing revenues. Expertise in a particular field is paid for through a licensing agreement, and the expense of having to conduct such research and development in-house is saved.

While licensing can ease cash flow problems, as a business decision one must keep in mind that licensing too much of your technology can, in time, put you out of business. Every licensor risks turning a licensee into a future competitor. Using your technology as a starting point, a licensee may develop the capability to develop the next generation technology. Thus, licensors need to be especially mindful of what constitutes their core technologies. If a firm is not mindful of this prospect, for the sake of a stable cash flow today it may license away the key technology that keeps it in business tomorrow, as the machine tool industry did in recent memory. As part of your business strategy you must set limits for what you are willing to transfer out of your company. Above all, protect your interests by securing and maintaining strong intellectual property protection.

BUILDING CORE COMPETENCIES AND CORE TECHNOLOGIES

Another decision factor is the extent to which licensing may assist in building your business' core competencies and core technologies. Core competencies (the fundamental areas of your company's expertise) and core technologies (the technical areas or technologies which form the basis of your business) derive from a business' capabilities, and—to the extent to which a firm intends to develop them further—from corporate strategy. The degree to which the acquisition or deployment of a given technology or product will assist in developing these competencies and technologies should be a primary concern for assessing the desirability of a potential licensing deal. In the examples above, Quabbin enhanced its core competency in steam turbine packing ring manufacturing and developed its core technology by acquiring an improved component through licensing. DuPont, on the other hand, took something of the opposite approach when technologies developed there did not fit with the firm's core competencies.

Again a word of caution: In seeking to develop your core competencies and core technologies, you must be careful to protect your intellectual capital. When you license technology in either direction, other businesses get a look inside your business. You may take pains to reduce your exposure through established methods such as confidentiality agreements, and, as a general rule, these methods work. In all cases, it is vital to your own interests that you do not give away processes, approaches, management techniques, and other forms of intellectual property to potential or actual licensing partners. Some of the people you will meet in this process will adopt the attitude that "If you're going to give it to me, why should I pay for it?'

THE PROS AND CONS OF LICENSING

Like most everything else in business, licensing agreements involve as much taking as they do giving. As you consider the licensing option, keep in mind the pros and cons. To take the bad news first, consider that when licensing:

- You lose control of your property—usually total control, for a long time, and often forever.
- The involvement of the licensor with the property is reduced. In most cases, to the point of no further direct involvement at all,

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after perhaps a limited stint as a consultant to the licensee.

- Finding the right partner is tough. The right one may make for great success. The wrong one may cost you terribly. Finding either takes looking. Despite our happy mythology about better mousetraps and beaten paths, do not expect your partner to find you.

- Protecting your interests is crucial. It is also difficult. Expect potential partners to utilize skilled negotiators, shrewd bargainers, and/or seasoned professionals. Negotiation of a legally-binding agreement is no place for an amateur. Go alone at your peril.

But there is also good news—often, very good:

- Licensing is a resource multiplier. A dynamic licensee can immediately put whole teams of professionals to work on developing, producing, and marketing an invention, product, service, or technology. The licensee can quickly obtain access to such property it currently needs but does not have: to produce or distribute a product, to perform a profitable service, to advance the goals of the business through the use of property acquired.

- Licensees see things you will not see. Licensees often perceive uses—and, therefore, markets—for a technology that the licensor does not. One licensee turned a salt water taffy machine into a new and highly efficient type of concrete mixer. The more markets, the more potential income.

- You may make some money and you may make it soon. The licensee may pay you money up front, although probably not as much as you would hope. In addition, they may agree to a minimum amount of royalties for some period.

- Licensing frees you to do something else. If what you want to do is retire, or go back to inventing, or to avoid having to continue with technical development by using a piece of technology that someone else developed, then licensing may serve your interests quite nicely.

YOUR BUSINESS STRATEGY

Clarity of purpose, though difficult to achieve, is one key to business success—especially in the business of licensing. Translating clarity of purpose into clarity in action is what implementing a business strategy is all about. Using licensing strategically assumes that your business has a strategy. To define and to develop your business strategy, you need to consider the most basic question: What business are you in? Research? Development? Manufacturing? You may, perhaps, be involved in all three areas. When you confront the decision of whether licensing will work for you, consider the business goals that option will help you to meet. What do you want for yourself? What do you and your business do best? And conversely, what do you do least well? Or not like to do at all?

The most fundamental tenet to bear in mind as you think about licensing is that licensing is a business decision. Therefore, any proposition to license must be judged on the extent to which it meets the goals of your strategy. For some it is profit (never a bad measure), for others it is the extent of change you are able to render—that is, how many users you get to use your technology or product; the extent to which it changes the world—even in the small world that your technology or product improvement will inhabit. Regardless of what drives you, remember to align the decision criteria you bring to a proposed licensing agreement with the business goals you seek to achieve. And remember as well that your potential partners—if at all intelligent about the way they conduct their business—will be doing the same.

A strategy, in essence, is a plan of action designed to meet specific goals. When considering the licensing option, consider your business strategy and how you might develop a licensing strategy that fits with it. Making this decision assumes that you are clear on several issues: you know what you want; you know what business you are in. It is, ultimately, about business—what will allow you to continue doing what you want to do, going where you want to go (providing that you are doing it already)? What will allow you to move into areas where you have yet to go but would like to?

CHAPTER TWO

PLANNING TO EXECUTE YOUR LICENSING STRATEGY

Let's suppose that several decision factors indicate that licensing will work for your business. Now you must begin planning to execute. You will need to formalize a variety of information about your technology (the filing cabinet stage) and collect considerable amounts of information about a variety of related matters: competing technologies, users of these technologies, the industry or industries where your technology will most likely be put to use, the firms in those industries, and the markets where users in those industries do their buying and selling. **This is your homework**. As was true of it in your school days, homework thoroughly done bears more promising results at grading time.

You must be able to persuade potential partners of the benefits of your technology, product, process, or service in the language most persuasive to them—the language of their business, their industry. (Likewise for prospective licensees: in order to communicate effectively with technical development and intellectual property specialists from whom you seek to acquire technology, you must be able to articulate the capabilities and user benefits you need, the specific technologies you hope to acquire, and the applications to which you intend to put them.) Thus you will need to understand the factors they use to make decisions to acquire technologies, the concerns that drive their industries, the competitive pressures they face in their markets, and the benefits that your technology may offer them. Furthermore, knowing about the industries and markets of potential partners serves the vital function of risk reduction. The successful licensing prospector reduces the risk that potential partners perceive by knowing as much as possible about the market, the industry, and the technology being discussed. The ability to reduce this information to clear, coherent summary statements of technical, market, and business issues will further enhance your credibility with potential partners, and reduce the risk partners will naturally sense in coming to a licensing agreement.

In very real terms, your job is to understand the effect your technology will have on the licensee's bottom line. How many new customers will the licensee sell to? Where will they be? Why will they buy? How will the licensee have to change the production line? What will it cost? Will production personnel work habits need to change?

DOING YOUR HOMEWORK

Homework enables you to provide detailed answers to the fundamental business question about licensing for your business: Is it worth it? Remember that the question must be answered in the affirmative for both parties to the licensing agreement. Both will have to believe that the license offers a clear value. Answering the question "Is it worth it?" for yourself and persuading potential partners that it's worth it for them, too, requires some detailed investigations into technical, market, and business factors.

Technical considerations are a first topic for investigation and study as you plan to execute your licensing strategy. If you are seeking to license a technology out, a prospectus or "tech brief" of the technology—one to two pages long—is a good thing to prepare. This prospectus will describe the technology and its primary and secondary applications. It should also compare the subject technology with competitive technologies, providing performance data if such is available. To help prospective licensees assess the value of the technology for their business, the prospectus should also credibly forecast business savings that can be expected as a result of the technology. If you are seeking to license technology into your business, ask the prospective licensor for a prospectus on the technology. And, if performance data and business savings are not part of the presentation, ask the would-be licensor to provide them. Such questions, while they may put the technologist on the spot, will give you some sense of the business consideration built into the subject technology.

Conducting an applications analysis for the potential uses of a technology is another helpful exercise for determining the value of technology—and for searching out potential new uses and markets for it. The applications analysis will consider, among other factors:

- A technology's robustness (the number of uses to which it may be adapted) and potential spin-offs from those applications

CHAPTER TWO

- Anticipated target industries for potential applications (i.e., one industry's taffy maker may be another's concrete mixer)

- Contacts and assets (e.g., vendors, users, manufacturers, technical credibility, R&D capability, regulatory drivers, availability of data) in these industries

- Rationales for developing technology for applications in target industries—which application, if developed, stands the greatest chance for acceptance in the marketplace, versus which would command the most lucrative market, if successful?

Finally, the strength of the intellectual property protection of a technology will also impact considerably on its prospective value. (See chapter three, *Strength of Intellectual Property Position*.)

Your assessment of the value of the technology must also consider industry factors. For each application you envision, analyze the industry in which the technology would be licensed. The next chapter reviews full-scale industry analysis in detail. The process of collecting and analyzing information is an evolutionary one. As you begin to assess the business value of the technology, collect what information you can about the industry, building toward a broader analysis. Such industry analysis should consider:

- Concentration of firms in an industry
- Decision making structure
- Technology and product development patterns
- Capital formation characteristics
- Regulatory drivers
- Life cycles
- Market buying characteristics
- Attitude toward intellectual property
- Technology transfer patterns
- Industry/government relationships
- Pricing policies and required returns on investment

In cases where you seek to license in an industry with which you are familiar, the task of doing homework will be less burdensome than in other cases. On the other hand, do not limit yourself to familiar industries alone. Multiple applications for your technology may be found in a number of unrelated industries; the same may be true for technical capabilities you may be seeking. Explore your options widely: the more you do, the more opportunities you are likely to find.

No assessment of the business value of a technology would be complete, of course, without attention paid to the market. Technology developers must take market needs and competitive advantages of a technology into consideration during development. Building market needs and user capabilities into the technology will make it easier to demonstrate to potential licensees exactly how the technology can meet their goals. In addition, you will need to assess the size of the market to be served by the licensed technology, to better determine the boundaries of the opportunity under consideration. Eventually, this determination will require a full-scale, formal market analysis. As with industry analysis, however, compiling data on markets is an iterative process. The elements to consider when analyzing potential markets include:

- Market size
- Market expansion
- Market segmentation
- Value of market in dollars
- Market share percentage
- Buying keys
- Competition
- Market trends and competition analysis
- Market idiosyncracies and drivers
- Pricing requirements
- Distribution channels
- Market entry requirements
- Key selling points ("points of difference" from other technologies)

SOURCES OF INFORMATION

As you search for a licensing partner, you will need to gather data on industries and markets. Generally speaking, you must find out who does what. That is, which firms use technologies, processes, or capabilities like yours? Which firms license technology in (or out)? How big is the market for your technology? How much of that market can you realistically expect to get, and why? What are the trends in the market? Who do you need to know in order to sell there?

Finding answers to these questions will take a good deal of legwork and the help of some experts who can point you in the right direction. For the moment, however, let us focus on the legwork part—that is, work that is most likely going to have to be carried out by you or someone in your firm.

PUBLIC INFORMATION

A good deal of the information you need to get is public. Your local public library will have a number of helpful resources either on-line or on the shelf. The popular literature (Inc., Fortune, Barron's, etc.) may provide you with snippets of the latest developments in particular industries and markets, or about particular companies. While far from definitive, this may not be a bad place to start. In addition, your local library should also receive regular reports from the U.S. Small Business Administration.

You may, in fact, want to start your search for information by contacting the Small Business Administration. SBA publishes a variety of reports and other literature, as well as videotapes on small business topics—such as managing your business, researching your market, and writing a business plan—that may be helpful to you. For a list of SBA publications, write:

Small Business Administration
P.O. Box 15434, Fort Worth, Texas 76119

You may also call for the list of publications or other information or for answers to commonly asked questions toll free at 1-800-U-ASK-SBA. If you have Internet access, check out the SBA home page at http://www.sba.gov, where you will easily find your way to state and local SBA offices in your region.

TRADE ASSOCIATIONS

Trade associations also provide useful information and assistance. Chances are the industry you are interested in has a trade association you can contact for a list of member firms.

Licensing trade associations should be of particular value in the search for experts in your area. We recommend contact with the Licensing Executives Society (LES) and the Association of University Technology Managers (AUTM) as places to begin. These associations regularly offer opportunities to present and/or display technology offerings—good places for prospective licensors to show their wares and for licensees to prospect for new technology. In addition, LES publishes the *Consultants and Brokers List* every two years.

PERSONAL CONTACTS

As useful as the trade association publications are, the contacts they can provide are more useful. Keep good lists of the helpful people you have spoken with, and always look to expand your list by asking people you get on the phone or meet at trade fairs for the names of other people you might be able to speak with.

Remember that, in gathering information, talking is important—especially when other people are talking, so listen carefully. A good conversation with an experienced contact can put years of industry knowledge right in your ear. Such conversations can provide you with more useful information than weeks of library research or publications ordering. Moreover, such people can tell you common industry knowledge that you might not find written down anywhere. So even if you are not a "people person," try to get people to talk with you, and listen carefully.

Through these various sources of information, you begin to get some idea of the shape of a target industry and the dynamics of particular markets. Leads about companies looking for technologies like yours (or looking to license technologies like the ones you are looking for) will begin to develop as a result of this process. Follow them up.

When you get that opportunity, it behooves you to know what you are talking about. In addition to the technology prospectus you have put together describing what you have to offer, you also need to be able to speak with some knowledge about developments in the industry and dynamics in the market. The best preparation in this regard involves constructing industry and market analyses. Whether you present these documents to potential partners right away is your decision to make. The primary beneficiary of completing these documents,

remember, is you. The degree to which you have done so will be evident in your discussions with potential partners.

COMMON MISTAKES IN DECIDING TO LICENSE

A number of standard mistakes occur frequently in licensing decisions. The sections above have touched on some of these. Let us highlight three common mistakes made during the early stages of the licensing game.

First is the propensity—especially among small businesses—to seek a licensing agreement too soon. Generally, upon the discovery of an innovation, a smaller business may leave very little time for reflection and information collection and instead march directly into a licensing agreement. The consequences of such a mistake may be costly—costing licensors a greater share of the profits that may have been realized from a more fully developed technology or concept, and costing licensees money to develop interesting concepts into products or technologies that actually work. As noted above, getting a technology to the engineering prototype stage ensures the licensor a fuller share of the profits realized from the invention and the licensee a technology that has been shown to work.

A second common mistake in making the decision to license is the belief that the option will offer a "silver bullet" for your business. "If we can just find that one technology, then we can turn this company around!" think too many enthusiasts of licensing in. Or, "if we can just find that one manufacturer to make this product for us, then we'll grow rich off royalties on the sales once it makes it to the market," the booster of licensing out may hope. Gamblers ruin! For sure, such things do happen. But not too frequently. The fact is, if your business is failing, the odds are against you that any licensed technology, no matter how good, will save you.

Finally, licensors, especially those who look for acquirers of their technologies, often hope to escape doing business—especially the marketing part. That is simply not possible. To find another business to license technology from you by definition implies that you will have to market technology. The belief that one can avoid that fate through licensing is misplaced. If you fail to market, you will probably fail to find a licensee.

CHAPTER THREE

FINDING A PARTNER

Having determined that licensing makes good business sense—that it fits your corporate strategy and can help you achieve the ends you seek—the question arises: How do you find a partner? The short answer is, you conduct a search and you interview prospective matches. The longer answer, of course, involves a good deal more than that.

In your search, you will need to locate, gather, and analyze information about industries, markets, and companies. Some of this you can do yourself, but with some you will need help. There is help available—some of it is free. Once you locate prospective partners and impress them with your potential, you need to investigate theirs. If they pass muster, then you can begin to investigate how a potential deal with them might be done. This chapter considers each of these steps in the search for a partner who is right for you.

DEFINING WHAT AND WHEN TO LICENSE

With the strategic intent for a licensing decision clarified and the rationale considered, the question of definition arises. What, exactly, are you thinking about licensing? If you are licensing in, what kind of performance capability do you seek? On the other side of the ledger, how well can your product or technology perform? In terms of technical capability acquired or deployed, several elements will determine how to define the technology or product.

The first of these is the technology's stage of development. The stage of development of a technology or product will help to determine the value of a technology—what the licensee is willing to pay or what a licensor can expect to make from it. Someone must pay for the development of a concept—however original or novel—into a functional and marketable technology or product. The further along in the development process the licensor has taken the technology, the greater its value. A technology on the drawing board, for example, with some measure of development actually taken toward product definition, will be worth more than a concept; and a working model of the drawing will be worth more than the drawing itself. If the licensor has not proven that the concept can be reduced to practice, the licensee will have to do so, and will, consequently, pay less for the licensed property.

How much better does your technology perform than similar technologies or products already on the market or under development? Answering that question means that your technology's performance needs to be measured—using standard indices—against competing technologies or products. That implies testing. Again, the level of development rules. Technical feasibility, taking the needs of users into account, will be demonstrated in early stage tests, while tests at later stages will confirm feasibility and generate data upon which the design of a prototype can be based. Prototype testing will lead to engineering and production prototypes, which will confirm the adequacy of the design and its performance characteristics and parameters. Here again, the technical stage of development will influence value by reducing perceived risk. The further along the development process an innovation has been taken, the more accurate the measurements of how it compares to other technologies.

A solid definition of the product or technology should be nailed down before licensing negotiations begin. This is particularly important to a potential licensor. Put another way, for the purposes of negotiating with potential licensees, the technology should be "frozen" at a given stage of development. The concept of freezing is especially important for new technologies that are a work in progress. You must be very clear on what capability you are prepared to license. Otherwise, the licensee may lay claim to advances or improvements you make to your technology while the licensing agreement is being negotiated.

STRENGTH OF INTELLECTUAL PROPERTY POSITION

A related issue involves the strength of the intellectual property position of the technology to be licensed. A license will by definition involve

access to property which may be patented, copyrighted, or protected by trade secret. The strength of those protections will factor in how much the license will be worth. Access to a competing technology that performs a similar function—or could with some additional design work—will lower the prospective value of the subject matter to be licensed. The risk of infringement will be considerably less if patents exist for multiple technologies that perform similar functions in similar (if patentably different) ways.

Factors that impact on the strength of the intellectual property position include:

- Coverage—You need to make sure that your intellectual property position protects your new development in as many aspects as possible: final product, product components, manufacturing processes (machinery and components), spare parts, etc. Sufficient coverage means more than just having a patent (or trademark or copyright). Adopting a systems approach to your intellectual property protections and securing protection for each component will help. Individual patents can be engineered around; the prospect of such mischief befalling your new development will be significantly decreased if you can protect your whole system.

- Competitiveness—Ideally, your intellectual property protections exclude competitors from infringing on your development. But copycats abound in the technology business. The competitive intellectual property position is one that excludes infringement not simply of your technology but, to the extent possible, of your concept. This may mean patenting technologies that you have rejected, as well as the one you actually use. Assembling a team of engineers explicitly for the purpose of trying to design around your technology may prove a useful exercise for demonstrating where the competitiveness of your position is most vulnerable.

- Marketability—Applications for intellectual property protections provide a means of marketing your technology that most inventors and small businessmen tend to overlook. Write your patent application in plain English (which is easy enough to do if you plan on it from the beginning). Prospective partners will be more interested in your widget if they can understand what it does and how, and why it's important. Illustrations, clear explanations of advancements offered over the state of the art, and a detailed discussion of the prior art are all things you can use as a part of your application to help turn a normally dry, technical document into a document that supports your search for a licensing partner.

- Licensability—Packaging your intellectual property in a manner potential partners will find attractive makes your technology easier to license. Offering data from field tests, recommendations on raw materials, manufacturing process parameters, a copyrighted operators' manual for your technology, or other supporting (and protected) pieces of intellectual property will enhance the value of your package to a potential licensee. A strong package that ties up loose ends should also help to speed the process of reaching an agreement and shorten the time it takes a licensee to enter your technology into use.

- Litigability—How well will your intellectual property position hold up in court? The better you can demonstrate a strong, defensible position, the more valuable your intellectual property becomes. Hundreds of factors—some human, some technical, some business-related—can affect the strength of your position. Once again, assembling a team of experts to brainstorm ways around your protections will suggest areas where your position may be vulnerable.

FORMALIZING INDUSTRY AND MARKET ANALYSES

To make a compelling case for why a potential partner should license with you, you need to be able to speak in a language they can understand. And, if you expect to be taken seriously, you need to have a command of the details. Hence, you need to be able to speak to potential partners in a knowledgeable way about the industries they are part of and the markets

they serve. Getting up to speed will take time and information.

Constructing industry and market analyses will help you sort and analyze the information you are collecting, and to sound credible when you talk with people. In the evolutionary process of licensing, the search for a partner creates an escalating need to gather, organize, and analyze information. As early as possible, you should begin organizing your information into a usable format. Writing your own analysis is probably the best way to become actively engaged in the task of learning about the conditions your potential partners face. It will demand that you organize, analyze, and synthesize the information you have gathered on industries, markets, and competing technologies.

Keep in mind that it's best to write industry and market analyses for each potential application you are investigating. For you, the search is about finding a licensing partner for your technology, but that technology will find its way into the market one application at a time. Thus, you need to be knowledgeable about each industry and market offering a potential application for the technology.

INDUSTRY ANALYSIS

Industries are like people: Although they all share some common characteristics, each one is different. A generic set of questions about the industries' salient characteristics will yield valuable information about them. Let's consider these common characteristics and the significance of each in your analysis.

Concentration: Industry concentration is defined as the number of firms in an industry and the relative power of each. Industries with more firms tend to be more competitive (and less profitable) than those with fewer firms. In industries dominated by a few firms, in-house technology development tends to be the rule, although this is changing in some industries. Generally speaking, larger firms tend to be more reluctant to entertain licensing proposals (from small businesses and individuals) than smaller ones. Industry concentration will indicate the leaders in the industry and where the larger market niches tend to be. Smaller firms may profitably enter into licensing agreements focused on exploiting such niches if they offer superior capabilities to users, at a sufficiently better price.

Decision making structure: Firms in particular industries generally tend to acquire and deploy technologies in similar ways. If you intend to market a technology to those firms, you need to know who and where the decision makers are. Specifically, you will need a champion on the inside willing to go to bat for a partnership with you. If that person is not the decision maker, or someone who cannot get close to the decision maker, you may be in for a long wait.

Technology and product development patterns: Do you know how, in the last 10 or 20 years, a given industry has developed new technologies and turned them into new products? Knowing about such development patterns will enable you to talk to decision makers with references they understand and will also provide you with something of a road map of the way product development works in a given industry. As a general rule, do not expect that your technology or product will deviate from their established patterns of development.

Capital formation characteristics: Understanding innovation financing in a given industry will provide you with a sense of what you— and your potential partners—are up against, especially if your prospective license requires a significant capital investment. The onus will be on you to prove to your champions the financial impact of your technology or product. If they can not understand how to finance its development based on the capitalization characteristics of their industry, it is doubtful that they will seek to persuade others within their organization that a deal with you is doable.

Regulatory drivers: The regulatory environment in which firms operate is an increasingly important industry characteristic. To market a technology in a given industry, you need to be aware of the regulatory environment in which firms operate. If there is some doubt that your technology complies with various environmental, health, and safety regulations, firms in an industry generally will

show you the door. On the other hand, if what you have to offer stands to enhance compliance with a given regulation, that can be a particularly important selling point for the technology.

Life cycles: Life cycles exist for technologies, products, markets, and industries. These follow patterns from concept and growth to maturation and decline (and, in some form or another, renewal). Know where your technology (or the technology you seek to acquire) fits in the pattern of life-cycle development. The latest iteration of a technology or product that is in decline probably is not something a licensor can expect to have great success marketing to industry. Likewise, it is not anything a licensee will want to be tied to for five years when the state-of-the-art is about to change dramatically. Similarly, declining industries will offer fewer opportunities for profitable business than growing ones. The future of a particular industry is one of the more important points for consideration when a technology has multiple applications. A declining industry may be an easier place to market your technology in the short-term, but if the industry does not have much of a future, then neither does that application.

Market buying characteristics: What drives the buy decision in a particular industry? In making the decision to procure technology, what do firms in the industry respond to? Price, quality, reliability, service, and reputation of the supplier all make the list for consideration. Different industries have different priorities.

Attitude toward intellectual property: Different industries view the importance of intellectual property differently. It is important to know what kind of intellectual property protection firms in the industry tend to seek for their technologies so that you can acquire the same— if needed—for yours. Then present your technology in the kind of packaging firms expect to see.

Technology transfer patterns: The patterns by which firms in an industry acquire technology will go a long way toward determining your chances for success at licensing in that industry. Some industries use licensing agreements less than others. Before getting your hopes sky high about doing a licensing deal with a firm in a given industry, it is prudent to discern which, if any, of the firms in that industry license, and what they look for.

Pricing policies and required returns on investment: Most firms have benchmarks that must be met to green-light acquisition or deployment of new technologies. If your licensing proposal cannot make a reasonable claim to a certain return-on-investment, your chances of doing a deal are slim. In addition, firms have established thresholds for what they will pay to acquire new technologies. If your asking price is out of the ball park (a common mistake of many a would-be licensor), you probably will not get a deal. Know the industry norms for technology acquisitions; expect that is what they will be willing to pay for yours. Decision makers will seldom be empowered to make exceptions—even for you.

Attempt to validate the data that you collect from trade publications, contacts, magazines, etc. A prudent rule of thumb holds that you should have two authoritative sources for each piece of information before it can be considered fact. Of course, this is not always possible. Do not let lack of absolute certitude delay you from beginning to assemble the information you have gathered about an industry in useful ways. Make guesstimates when you need to. Like other aspects of this process, the confidence with which you can analyze the behavior and characteristics of a given industry will evolve.

MARKET ANALYSIS

As you collect information about industries, information about their markets will come to light. Markets drive business. If you cannot show how your proposed license should work in a given market, you cannot convince a partner that your deal is worth their while. (And if you can, maybe you'd better take a second look at your partner.) For each potential application, it is important that you clearly define a particular market.

What is a market analysis? It is a detailed breakdown of who the potential customers are, how many of them there are, how much they will pay, what the competition is, and how you can beat it. Your analysis should describe the market channels through which products like yours reach the user. Moreover, you should be able to define three

significant points of difference between your product and its competition. (If you cannot, you have a problem.) Above all, your analysis has to demonstrate clearly why people will buy your product, using statements from prospective customers, backed up with believable figures in dollars and cents. The surest way to turn off any prospective partner who asks about the market is to say: "When they see it, they'll buy it." Their likely reaction (probably unstated): "You obviously have never tried to bring something to market before." Regardless of technical elegance, a technology or product will succeed only if a large enough market exists to support it. In light of that cold, hard fact, your market analysis had better show that the business risk stands a good chance of paying off.

The following are fairly standard considerations in any market analysis:

Size/Scale: Market size is a critical factor in targeting potential licensees and licensors. A $20 million market may be pocket change to a large corporation. At the same time, the same market may overwhelm the production capabilities of a smaller firm. Somewhere in the middle there is a firm for which this market is ideal. The critical nature of this market "scale" factor makes it imperative for small business innovation managers to carry out what amounts to a double-edged market analysis as they pursue licensing agreements. That is, they must carry out a standard market analysis with precision sufficient to approach potential licensees with reliable data. They also need to carry out an industry analysis to identify the market thresholds their potential partners will seek.

Market segmentation: Most markets break into subdivisions, or segments. Segments can be based, for example, on price (high-end, medium-range, low-end), or quality (from very reliable to reliable enough), or types of product variations (i.e., nylon-fiber, wax-coated, or uncoated dental floss). You need to know the segments of a given market in order to reliably estimate the impact of a technology or a product in that market: Will it work in all segments, some segments, and how much product can be sold in each?

Dollar value of market: Fairly reliable data exist for the size of almost any market imaginable. Market size drives all other marketing calculations. How big—exactly—is the pie? You should be able to discuss the future prospects of the market: Is it likely to expand (by how much), or contract (by how much), and why over the next several years, including the factors affecting market size.

Market share percentage: In keeping with the pie metaphor, market share is your slice. Estimates of potential market share are best made in ranges, from best to worst case scenarios about the potential sales, and why.

Buying keys: These are the reasons customers buy a given technology or product. Following are seven, fairly generic such categories. In your market, there may be more, and they may be different, and the weight given to each is particular to a market.

- Competition—The degree of competition in a market will determine the attractiveness of whatever capability you have to offer. In very competitive markets, new technologies tend to be more in demand. In less competitive markets, there is less impetus for buyers to acquire or deploy new technologies. Lacking a sense of urgency to breed market dynamism, such markets tend toward the status quo.

- Market trends and competitive analysis—Present and future trends in the marketplace, as suggested, impact the decision to acquire or deploy new technology. To build a persuasive case for your capability, buyers need to see that you have anticipated or at least caught up with a trend in the market, and how that capability will help them pull within the market leader or stay out in front of the pack. This is an especially important point in cases where the market is changing quickly, and where all players are scurrying to ride the latest or next wave. To be thorough, you should be able to discuss who the competitors in a given market are, the strengths and weaknesses of each, and other factors that account for their position in the market.

- Market idiosyncracies and drivers—What is the "personality," so to speak, of a particular market? What stimuli does it respond to, or is it responding to at present? A couple of

years ago, for instance, the makers of disposable lighters seemed hellbent to come up with a variety of mechanisms to challenge the dexterity of adults by making their products "childproof" in response to regulatory pressure. Such idiosyncracies often have a profound—and lasting—effect on markets. You need to be aware of them, and to tailor your proposals accordingly.

- Pricing requirements—Buyers pay what they do for a technology or product for a variety of reasons, depending on the market. Regardless of what other advantages your technology might have to offer, you have to meet the price that buyers are willing to pay.

- Distribution channels—Every market is structured around certain channels of distribution, and the logistics of each need to be considered as you look to enter a market. Many industries tend to cluster in certain regions (the more obvious examples include autos in Detroit, oil along the Mississippi Delta, semiconductors in Silicon Valley), hence the fairly localized channels of distribution of many markets that serve them. Others tend to be seasonal, with large lot purchases happening at specific times during the year. Your market analysis needs to address the specific conditions of the distribution channels that serve the target market.

- Market entry requirements—Every market has certain thresholds which a product must cross in order to compete. Company profitability depends on obtaining a certain amount of sales. Selling that much will mean, in turn, contact with so many distributors at a fairly predictable volume. Meeting the distributors demands will require so much production. If along the way your partnership cannot produce a certain volume and access enough distributors, your product will not get to the market in sufficient numbers to turn a profit—a condition no business venture can survive indefinitely.

- Key selling points ("points of difference")—What are the advantages that your technology, product, or process offers users? Why should they buy it? When marketing your capability, you need to be able to clearly identify its key selling points, the features that differentiate it from what's currently available. Generally speaking, you should be able to identify at least three "points of difference" between your technology and currently available products or capabilities. Price may be one such point, as may greater reliability, greater ease of use, energy efficiency, better quality, improved regulatory compliance, or another. The point is, you need to be able to tell prospective partners quickly and persuasively why what you have to offer is better than what they can get right now.

SOURCES OF ASSISTANCE

Finding a licensing partner requires a great deal of legwork, to be sure. In order to make the most of your efforts, you will need expert guidance. Find it, and use it. Expert help does not come cheap. But the shortcuts knowledgeable professionals can show you and the blind alleys they can help you to avoid will in most cases save you much more in time than the cost of their assistance.

Find talking partners with whom you can discuss your licensing strategies and the progress of your search. A talking partner is an experienced professional who will take an interest in your business, and who will point you in the right direction for whatever reason: it is an interesting project, for a fee, for a percentage of profits realized from a successful deal, or for some other reason. Such partners can prove to be invaluable in a number of ways: as a sounding board for your ideas, as a referral source to experts in particular fields (e.g., finance, marketing) or industries, and as a business confidant with whom you can share your impressions of and, occasionally, your frustrations with people met, firms contacted, or the process in general.

With corporate downsizing, right sizing, and other efforts to streamline organizations to focus on core competencies and capabilities, the availability of licensing professionals has grown considerably. And an increasing volume of licensing activity has made expert help more generally available than it was, say, 20 years ago. In seeking such assistance,

contact trade associations, such as your local chapter of the American Bar Association, American Intellectual Property Law Association, LES, or AUTM, which can provide you with references to experienced professionals.

For decades, licensing has been viewed as a traditional preserve of the patent attorney. The increasing use of licensing as a strategic tool in business has created a demand for a more specialized form of expertise—the licensing professional—who may offer more assistance than a traditional patent or general business attorney. These days, the high tech section of a general business firm has become a standard repository of such expertise. Attorneys employed or retained by firms that routinely license are more plentiful than ever. You may not always be able to find one in your area. But there is no reason, save for an aversion to conducting business by phone, fax, and mail, not to retain an expert located elsewhere.

Apart from legal expertise, a variety of other expert help with marketing, finance, licensing, management, technical development, and other areas is available in the form of consultants. Check their references, and if references are not positive or forthcoming, look elsewhere. This bow to prudence not withstanding and your resources permitting, qualified consultants can save you time and money. Use them.

PARTNER QUALIFICATION

So far, we have focused mainly on what you can do to impress potential partners as a knowledgeable, capable professional in business. Such an impression will, of course, encourage people to do business with you. But in the excitement of the moment when someone contacts you about maybe doing business, remember that you, too, have questions to ask. Principal among these: Is this someone you want to do business with? Can they do what they promise to do? Not just any partner will do. Licensing your technology to the wrong firm can ruin its chances for success, and may jeopardize your entire business.

You must find a partner whose capabilities complement your own, and one capable of holding up their end of the bargain. You are responsible for checking them out.

A number of elements need to be considered when examining the qualifications of a potential partner. Develop a list of characteristics and capabilities you want in a partner; evaluate how prospective partners measure up to that standard. Listed below are some of the more important facets about the partner's business to check. For each, the overriding question is: Can this potential partner deliver what they promise, and do they have a track record to substantiate their claims?

- Scale and Scope—How big is your partner, and what is the range of their activities? Questions of scale and scope indicate how important your partnership might be in the broader scheme of your partner's view of things. If, for example, you enter into a partnership with a $20 billion business, how much attention will be paid to the $2 million in sales that your partnership generates? How much time will they give the agreement before they declare it a loser and cut you loose? On the other hand, partnering with a small firm that is entirely dependent on the revenues your licensing agreement brings in may be equally unnerving. If the firm needs you that badly, are they competent to be in business, and— more importantly—do you want to be the only one with anything to bring to the table?

  Preliminary research into licensing agreements strongly suggests that licensing agreements tend to work best among firms of similar size. "Individual inventors and small firms fare much better in their licensing endeavors when they target potential licensees incrementally larger than themselves," according to one report. "Technologies fare better if they pass up the corporate food chain one level at a time," as one licensing executive put it. Organizations of similar scale do tend to communicate better. They grasp each other's manufacturing, marketing, and business problems more easily, they can coordinate solutions to them more quickly, and implement licensing agreements with significantly less friction than organizations of very different sizes.

- Technical capability—A would-be partner also needs to demonstrate technical aptitude.

Does their firm have a history of performing the sorts of tasks expected of them under a proposed agreement using similar technology, and what is their performance like? What technical strengths and weaknesses do they bring to the deal? The partner's ability to work out kinks smartly, without major disruptions in the flow of production or service delivery, will invariably impact the success of your licensing agreement and the fate of your business.

- Marketing capability—When your partner will be marketing the product, technology, or other subject capability of the licensing agreement, its marketing capability deserves careful scrutiny. Has the firm shown good judgment in past marketing decisions on projects similar to the one you are contemplating? Does the firm possess the requisite knowledge of the market into which you will be selling? Does it have access to the appropriate distribution channels to sell to that market? If not, what plan are they offering to get there?

- Business management capability—How well is your partner's firm run? What do its financials look like? What sort of reputation does the firm have in the industry and in the market? Steady, forward-looking management will not necessarily attract a lot of attention, but its performance will speak for itself.

- Ability to take risks and overcome barriers—As a corollary to the management capability, you need to know whether a potential partner has the capacity to overcome technical and market barriers, and whether they will be willing or able to take the risks necessary to make inroads in new markets. The track record of your potential partner in new product launches or product improvements should provide some indication of whether the firm has taken risks or merely ridden waves to get where it is.

Project specific inquiries need to be made about any partner. Qualification criteria will tell you about a partner generally: how well they run their business, about their capabilities and characteristics. But you also need to assess whether a partner can and will provide the things needed to make your licensing venture a success.

Specifically, you need to assess your partner's capital acquisition capacity. If the success of your licensing agreement is contingent upon significant up-front capital outlay, and you are looking to your partner to provide it, it behooves you to know your partner's capital acquisition capacity. What lines of credit from banks do they have at their disposal? What kind of access do they have, have they had, to venture capital? What are the limits of that capacity? Will they be able to raise the money you need? Do they understand the relationship between an excellent plan and capital acquisition? Success in the market will be contingent upon the ability to provide resources generically—technical, financial, human, etc. As with capital acquisition, assess the ability of your partner to provide other resources where and when they will be needed.

SETTING THE DEAL

Partners will be as excited to find you as you are to find them. Getting enthusiastic about the prospect of doing a deal where both sides stand to win is only natural. But, especially when you're feeling optimistic, it is imperative that you remain focused on what got you this far in the first place: your strategy and the search for a partner that fit into your strategy. While it is fine to talk about potential deals, keep your head. Do not commit to anything and do not dare sign anything (with the exception of, say, a confidentiality agreement) when such conversations begin.

Know what you want from a deal when you begin talking seriously to prospective partners. Refer back to your strategy and consider the sorts of modifications that might need to be made in order to do a deal with a particular prospect. While flexibility is a necessary part of doing business, you will need to set clear limits beyond which you cannot bend; elements were included in your strategy for a reason, after all. At what point do the changes demanded of you take you places that you did not intend and do not want to go?

Likewise with potential terms of the deal. Your market analysis, for example, will show that a given application should produce a certain amount

of sales, and, consequently, a certain amount of revenue—of which you should be entitled to a certain percentage. A potential partner, however, may value the technology differently, or project a smaller market (perhaps because this is not their primary niche)—and they estimate that you should receive a certain, smaller percentage. Again, know what you want. If you and a potential partner view a particular opportunity altogether differently, perhaps you should not be partnering.

Knowing what you want from a deal is less a matter of complex calculation than it is about focus and clarity. Going into preliminary discussions, you need to know and be able to articulate clearly the ranges within which you expect the deal to fall. (You will be willing to commit between this much and that much capital, this much and that much time, this much and that much technology and technical assistance, etc., to the deal.) If your potential partner's ranges fall completely outside your own, be willing to accept the possibility that your expectations just may be too different to reach a mutually workable agreement.

Such should not be taken as advice to storm out of talks and dramatically smash relations with people you barely know. (As we will discuss in the next chapter, such tactics, in the long run, seldom produce the kind of results you want.) Instead, we argue that you need to be able to lay out your expectations clearly. Let the other side do the same. If the difference between the two sets of expectations is too great, there simply may be nothing to negotiate. Do not waste too much time pursuing a deal with this firm. Find another who sees the world more along the lines that you do.

CHAPTER FOUR

NEGOTIATING A LICENSING AGREEMENT

When preliminary discussions demonstrate the seriousness of all parties—when visions seem to match, interests in a project dovetail, the views of a potential licensing venture align, and personal relationships work— then it is time to take the next step in making the project happen: negotiating an agreement. The "details" of the agreement can make or break a project from the point of view of either party. Negotiating the details should never be left to amateurs. More than ever, at this stage you need the benefit of professional assistance. If you have not had the time or the money to bring a licensing professional into the process yet, now is the time when you absolutely must.

While you will need professional help to navigate the negotiating process, you will, of course, be more than a detached observer. The following chapter outlines the process of doing a deal with a partner, and covers some additional factors to consider as you make your selection. An overview of the negotiation process and the framework of a licensing agreement follow. But the deal does not stop there—contrary to popular belief. An agreement is an organic thing. As such, it requires maintenance. Maintaining your agreement is a key component of building the long-term relationship with your partners that will ensure amicable and mutually beneficial results for the term of the agreement and beyond.

PICKING A PARTNER

The last chapter detailed things you need to be cognizant of when examining a potential partner's qualifications. What it did not tell you is which partner to pick. That is a choice that no one can make for you. In determining your "fit" with a potential partner—and their fit with you—the fundamental things are important. Your strategy will determine, to some degree, who you want or need to license with. If you seek national distribution capabilities, for instance, a local firm that sells in two states may fit in every other respect but its scope. You have a choice to make—trade off a good fit and the prospect of a good working relationship for access to a larger market. If your analysis tells you that your capability has national promise, a larger partner (or at least one with access to a larger market) may be worth holding out for.

Other factors you need to consider involve the harmony between the partner's vision and your own. Do you view the project (and business generally) in the same way? Are your views considerably different? As in other relationships, a common vision of the future of a licensing relationship is important. A shared vision gives the partners a sense of what to expect from the future. While visions likely will not—and need not—match perfectly, visions in sharp conflict will ultimately manifest themselves as strains on the relationship, when decisions need making and the partners see things differently.

Apart from but related to a common vision, the partners need to have harmonious expectations. This means, first, that you are clear about what you expect—about what your business needs to make the agreement worthwhile (e.g., rights to product improvements, access to markets in a particular region, exclusive rights to manufacture for two years). At bottom, you have to be absolutely clear with yourself on what you need from this relationship. (Remember, needs come before wants.) If the partner cannot provide what you need to make a project work, no matter how harmonious your visions, no matter how well you seem able to get along, the agreement will fail. What you need is not necessarily the same thing as what you will settle for. A smart business person should arrange to make a buck—not to break even. But knowing what you need will provide you with a basis from which to extrapolate the rest: what you want, what you are willing to settle for. Be clear on these things as you approach negotiations, and during negotiations, be firm, but reasonable.

NEGOTIATIONS AND THE AGREEMENT

Going into negotiations, you will need an agenda. That is, you need to know what you want from the agreement—what your ranges of

acceptability are in each area covered by the agreement. An agenda is not a secret plan for fooling the other side—for breaking their concentration, dividing and conquering, or anything like that. Some will advise you to employ tactics to that end in your negotiations. Such tactics are, in our view, counter-productive. Do not bother with them and, if you are subjected to them, you may want to reconsider your partner.

You must protect your interests. And you should also respect the other parties' need to do the same. Negotiation is not war, after all. It is about reaching consensus, coming to agreement. The goal of a negotiation, moreover, is not simply to hammer out an agreement that works for you. It is to come to an agreement that helps to develop a long-term, mutually-beneficial business relationship—a partnership, in the truest sense.

THE AGENDA—OUTLINE AGREEMENT

Negotiations should be clear and open. You have nothing to hide. As such, a particularly helpful strategy is to begin by presenting a prototype agreement detailing positions you find acceptable for the different agreement clauses. Let us take a moment to outline a typical licensing agreement. As a rule, a licensing agreement will contain the following clauses:

A. Identification of parties
   1. Date
   2. Addresses
   3. State of Incorporation

B. Whereas clauses (recitals)
   1. Purpose of the agreement
   2. Facts leading up to the agreement
   3. What each party brings to the agreement

C. Definitions
   1. Field of agreement
   2. Licensed product/process/service
   3. Licensed intellectual property
   4. Confidential information
   5. Affiliates
   6. Net revenues

D. Grant of rights
   1. Exclusivity
   2. To make, use, and/or sell
   3. Grantbacks
   4. Geographic limitations
   5. Field of use limitations
   6. Cross licenses
   7. Sublicenses

E. Consideration paid for intellectual property rights
   1. Up-front payments—lump sum, sum for paid up licenses (no running royalty)
   2. Running royalty—base rate
   3. Annual or other minimums
   4. Technical support—scope, cost
   5. Patent maintenance—scope, cost
   6. Special provisions—currency, stock, etc.
   7. Most favored licensee

F. Payment of consideration
   1. Accounting methods
   2. Timing of payment
   3. Record-keeping requirements
   4. Audit rights

G. Major license restrictions
   1. Government export limitations
   2. Liability limitations—indemnifications, insurance, warranties, etc.
   3. Tax payments—lack of partnership, tax-like payments
   4. Guarantees, test runs

H. Confidentiality
   1. Definition
   2. Term

I. Enforcement of/defense against intellectual property rights
   1. Notification of infringement
   2. Responsibility for enforcement/defense
   3. Payment for enforcement/defense

J. Future intellectual property
   1. Responsibility for protection
   2. Payment for protection

K. Duty to use (best efforts)

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L. Termination
   1. Term of agreement
   2. Conditions for termination
   3. Default
   4. Post-termination obligations—confidentiality, payments, etc.

M. Other provisions
   1. Impossibility to perform (force majeure)
   2. Severability
   3. Arbitration
   4. Assignments
   5. Entire agreement
   6. Governing law
   7. Notices
   8. Execution

This is the general format that your agreement— the formal embodiment of your deal—will take. It is, to reiterate, a complex, legally-binding document that should be written and reviewed by experienced hands.

Providing a draft or prototype agreement to your potential partner will make your positions clear. It will also provide them with a chance to think about how they would like to respond. Generally speaking, and assuming the good will of your potential partner, providing a prototype agreement allows the parties to be clear on what each party is after. Negotiating in a spirit of consensus-building, each should be able to work out the details in a way that meets the positions the other party considers vital.

DEFINITIONS

Given all the legalese a license agreement contains, it is particularly important that key terms of the agreement be spelled out with utmost precision and clarity. Those terms which could lead to disagreements between parties—terms like "technology," "royalty base," "improvements," and the like should be defined clearly in the document. They should also be defined once—in the definitions section. One common problem in licensing agreements is the use of the same term (e.g., technology) to mean different things in different parts of the agreement. This practice leads only to confusion.

Carefully defined terms that all parties understand are one of the most important things you can do to ensure not only compliance with the agreement, but the development of a mutually beneficial and harmonious business relationship for the long haul. At the moment, it may seem to be haggling over technical details. But the few hours it costs will be more than worthwhile down the line, when the memory of the negotiation is hazy—and so is the definition in the agreement. Either party may feel perfectly within its right to take actions the other considers grounds for termination if terms and conditions are not carefully and precisely defined. Such circumstances can lead only to discord. To avoid them, make sure your definitions say what you mean in exacting detail.

TERMINATION CLAUSES

Termination clauses are an unpleasant subject to broach in the midst of good feelings that accompany a successful negotiation. No one ever wants to rain on the parade. But business is business. And the best time to negotiate these clauses is while both sides feel positively about one another.

Termination clauses involve the conditions under which a license becomes null and void. Generally, these clauses stipulate actions taken in violation of the agreement and actions promised but not performed as causes of termination. Mature parties can—and should—negotiate these clauses while continuing to define the relationship positively. They must be negotiated to guard not just against bad faith, but bad luck. If things do not work out as planned, if one party cannot live up to the obligations it agreed to, the other should be free from its obligations. While one wishes that such unforeseeable events never occur, they do; thus the need for clear grounds for termination in the event that such unanticipated conditions arise.

An important corollary to termination clauses are clauses covering conflict resolution. It is wise to describe in the agreement how the parties will resolve their problems without recourse to termination. In some agreements, an objective person (i.e., someone who does not work for either party) may be specified as a mediator of sorts—the person who will listen to the concerns

of the licensee and the licensor and offer an opinion about how to settle the dispute.

MAINTAINING THE AGREEMENT

Many first-time licensors believe that the licensing deal ends when the agreement is signed. But signing the agreement is really only the beginning of the partnership. The agreement establishes terms and conditions—these alone do not a business relationship make.

Like any other relationship, a business relationship requires maintenance, basic up-keep, especially if it is to stand the test of time. Some of what you can do to develop this kind of business relationship has to be done in the agreement and in the negotiation process leading up to it. If you have agreed to reasonable terms, rather than driven for the utmost advantage for yourself on every point without regard to your partner's position; if you have shown yourself to be trustworthy in the negotiation; if you have demonstrated your willingness to undertake this risk in a spirit of goodwill, then you have made a good start. More, however, remains to be done.

SCHEDULE PERIODIC REVIEW MEETINGS

Regularly scheduled review meetings to check the status of the project provide a structural tool for maintaining contact with your partner. Such meetings, held monthly at first perhaps, then quarterly, will keep each partner attuned to the project and its progress. Technical, market, and business issues attending to the venture may be discussed—and ideas exchanged about possible solutions in problem areas.

Such meetings also provide opportunities to explore additional options, related to this venture or others. If the agreement has granted rights to use a technology in a given region, for example, and the licensor has yet to find partners in other areas, while the licensee has developed access to larger channels of distribution, the parties may find it in their mutual interest to revisit that portion of the agreement. Periodic review meetings provide the opportunity for information exchange and they keep the parties in touch with one another. As such, they serve a useful function in the maintenance of the agreement and the business relationship.

MAINTAINING CONTACTS

Another thing you can do to maintain a relationship involves an amazing technology: the telephone. Pick it up from time to time and call your partner. Find out how things are going— on the project and with business generally. Perhaps a technical person at the company was your first contact, at a trade show in Cleveland, who somehow since dropped out of the picture; or a marketing person who once explained to you in great detail the potential of your technology if applied to a particular market, and who, in the process, gave you an excellent explanation of how distribution channels work. Call these people! Even if you have since moved on to having a relationship with the president of the company, your first contacts are often your best contacts. Keep the lines of communications open. You never know what you may hear.

DOCUMENT EXCHANGES

Sharing documentary information is another means of maintaining your business relationship. Perhaps you have developed a new application for your technology, or have improved your capability. News of these things would certainly interest your partner. Perhaps the new application might apply to their business—perhaps not. But the act of sharing information can itself be a confidence builder, and is another way to keep the lines of communications open.

Sharing information can be profitable as well. An idea you come across that strikes you as marginally interesting may provide your partner with the inspiration needed for a product improvement. Provided you have covered your bases in the agreement in regard to grant backs and product improvements, sharing such information should not cause you problems.

EXTENSIONS

Earlier we noted that a well drafted licensing agreement should contain termination clauses, which allow you or your partner to escape from the deal if, for some reason, things do not work out.

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If you succeed in maintaining a positive business relationship with your partner, at the end of the term of the license both sides may want to agree to an extension. In anticipation of this possibility, a carefully drafted agreement should also provide for extension of the license, provided both parties consent to such an extension at the end of the term. Such a clause will have the advantage of sparing the parties the need to renegotiate the license, and may in fact help keep the partners looking beyond the term of the agreement and focused on maintaining a mutually beneficial relationship.

REFLECTIONS

A wise licensing professional once shared this maxim: "The success of any licensing agreement is inversely proportional to the number of times it is taken out of the filing cabinet over the term of the agreement." His point goes to the importance of "spirit" in a licensing agreement.

Partners who trust one another and expect to work well together do not need to go checking the chapter and verse of an agreement every time a question comes up. Successful partners work things out. They discuss disagreements candidly, they maintain contact with one another, and they stay focused on making the agreement work for both parties.

The "spirit of agreement" is especially important. For agreements, as exacting and as comprehensive as they should be, cannot possibly anticipate every contingency. Invariably, unforeseen developments will arise, and partners will have to discuss the details and ramifications and work them out. That—not legally-binding words on a notarized page—is what a partnership is all about.

Finally, such unforeseen developments do not always call for amendments to the agreement. In fact, they seldom do. Letters or memoranda of understanding often suffice to document new plans based on unexpected developments. Agreements should be amended only in cases of fundamental changes. If you have done your legwork, done your homework, and sought the counsel of experienced professionals, such fundamental changes should be rare.

COMMON MISTAKES IN NEGOTIATING AGREEMENTS

The most common mistake one finds in licensing is the tendency of licensees and licensors to negotiate themselves. The experienced hand in industry, after all, may have seen hundreds of licensing agreements in his or her time. The question naturally arises: "Why do I need to hire someone to do something I've been doing all my life?" Because, even if you are a lawyer, you need an outside professional to handle the negotiations and the documentation. For the licensor who has spent years developing a technology, critical questions about its performance may deliver a personal sting and trigger an emotional response—as if the other side had insulted one's children. Furthermore, the detachment and attention to detail that outside counsel will bring to the negotiation will serve you better in the end. Perhaps, having focused on what you wanted to achieve from the agreement, and been given it, you make a concession simply to conclude a deal that six months later you regret. A professional paid for this service, on the other hand, will be less vested in the negotiation, and better able to critically examine the potential impact of each clause.

Another entirely too common mistake is the tendency to see negotiations as adversarial. People adopting the "warfare" view of negotiations will employ techniques like using "good guy/bad guy" scenarios, throwing fits of temper, low-balling, changing negotiators, walking out of negotiations, and more. The tactical use of such techniques is a serious mistake. First, they threaten to seriously damage your credibility (if you think the other side has not seen them, you are probably wrong). Second, they invite the same kind of response from your potential partner, bogging negotiations down in posturing rather than in getting an agreement done, which, since you both hired lawyers, is costing the two of you money. And third, it undermines the potential for long-term amicability and profitability in the relationship, by causing the other party discomfort, by forcing them to make concessions they probably should not make, and by committing them to doing things they probably cannot do. While the more self-consciously "hard-nosed" will call our approach naive, we believe that theatrical contrivances will cost you eventually by making you look silly, by forcing a

partner to accept conditions that they cannot live with, and by poisoning the reservoir of good will that a successful deal creates.

Remember that a licensing agreement is about a relationship and that a relationship is something you maintain through contact. While the "thanks very much, now send me my royalties." mentality is common enough, it does not, in the long run, do very much to protect one's interests. Keep contacts open and regular, and stay abreast of the latest developments. Call people. Bother to keep an eye on things. At the very least, you will stand a much smaller chance of being surprised.

Finally, the best agreements are ones that involve technology licensed at an appropriate stage of development. Too many licensors have rushed into a deal for a technology that would have fetched a higher price had they only taken another couple of months to do the testing themselves; likewise, too many licensees regret having made deals for technologies too early in the game, thus saddling themselves with development and testing work that costs them time, money, and anxiety. A licensing relationship is like a marriage in many ways. One of the worst things you can do is rush into it.

CONCLUSION

You now have enough information to begin making the licensing decision. Licensing is not for everyone. And licensing can be as difficult, in its own way, as starting or expanding your own business. The trick of succeeding in licensing is to **"ride the expert express"** thereby avoiding the pitfalls a professional will steer you around. We wish you the best possible experience with licensing.

APPENDIX ONE

LICENSING IN: WHITE INDUSTRIES

White Industries has been a manufacturer of industrial brooms, mops, brushes and the like for many, many years. It is a public company, with the White family owning a substantial amount of the stock.

A few years ago, Jim White, the CEO of White Industries and the grandson of the founder of the business, decided that industrial cleaning chemicals was a natural diversification for White Industries. Of real importance to White was his determination that there was room in the U.S. market for another source of industrial cleaning chemicals, particularly one in the advantageous position of White Industries. White reasoned that the customers of brooms, mops, and brushes were users of industrial cleaning chemicals, so the new products could be sold through the existing channels used to sell the current products and under the highly regarded White Industries label.

White could not achieve its diversification goal through the acquisition of a manufacturer of industrial cleaning chemicals. The cost of doing so was beyond the means of White Industries and White was unwilling to part with a large block of stock to make such an acquisition.

White decided against "starting-from-scratch" to develop the new product line, hiring experienced product development professionals, feeling that the risks were too great. Although the company had a certain amount of knowledge about industrial cleaning chemicals because their nature and characteristics had to be taken into consideration in the design and development of the brooms, mops, and brushes, neither White nor anyone else in his company knew enough about the new business to develop adequate confidence that they could manage product development and establish the manufacturing capability for the new venture entirely on their own. Also, White estimated that it would take at least three years for White Industries to introduce its new product line if the company proceeded in this way. This was far too long to suit White.

White also considered a sales agreement with a manufacturer of industrial cleaning chemicals who would bottle and package these products under the White Industries label. But he decided against such an arrangement because White wanted to control the manufacture of products sold by White Industries. White did not want to be at the mercy of another party in negotiating prices nor dependent upon someone else for timely deliveries of products. Much of White's thinking reflected the mindset of a manufacturer who wants to manufacture the products it sells, rather than resell someone else's products.

White decided that his diversification goal could be achieved best by a license with a manufacturer of industrial cleaning chemicals and he set out looking for such a manufacturer. He contacted a few U.S. manufacturers and quickly confirmed what he expected, that none were interested in setting up a U.S. competitor by putting White Industries in the industrial cleaning chemicals business. It became apparent that White would have to find a foreign manufacturer who had no U.S. market to protect.

White's search for such a manufacturer involved reviewing trade directories, contacting trade associations, and making informal inquiries of users of industrial cleaning chemicals. He concentrated his efforts in Europe and Australia. His requirements were that the manufacturer have a commercially proven product line and a good reputation. By contacting customers, White not only found prospective licensors but also learned about the quality of the products sold by these manufacturers and their reputations and reliability. A great deal of time and effort went into the search. White made two trips to Europe and one trip to Australia. While on these trips, White visited a few manufacturers who, after an initial impression, seemed to meet his requirements.

One of the companies that White visited while in Australia was Down Under Chemicals. Down Under Chemicals indicated to White that it was interested in a manufacturing license. Early in the initial meeting, the parties discussed an arrangement that included a sales agreement

which would precede the license. With such an arrangement, Down Under Chemicals would achieve increased sales and White Industries could enter the industrial cleaning chemicals business fairly quickly. White decided on Down Under Chemicals as his first choice and, three months after embarking upon his search, started negotiations with the company.

Over three months, White and Down Under Chemicals negotiated a deal that included:

1) a two-year sales agreement under which Down Under Chemicals would bottle and package products for White Industries with the White Industries label, and

2) a manufacturing license that included:
   A. technical assistance, and
   B. patent rights.

For the most part, the arrangement was negotiated during visits by White to Australia and by Down Under Chemicals people to the United States.

White, at the outset, was interested in only a one-year sales agreement, but Down Under Chemicals explained that it needed some quick benefits to justify entering into the license and that two years of sales would satisfy this need. In return, the manufacturing license did not include any initial, up-front payment.

The manufacturing license called for royalty payments by White Industries based on sales, with the royalty rate declining as volume increased. In return, Down Under Chemicals agreed to provide technical assistance in helping White develop its own manufacturing capability. This included assistance in layout of the manufacturing facility, selection of equipment, choosing U.S. suppliers of raw materials, and much documentation about the products and manufacturing procedures. In addition, employees of White Industries were to be trained at Down Under Chemical's plant in Australia and at the White Industries' facility after it was in place. Although the license included the grant of rights under patents, the more important part of the license, as far as White was concerned, was the commitment to provide technical assistance that would establish White Industries as a qualified manufacturer of industrial cleaning chemicals.

With the agreements signed, White Industries was selling industrial cleaning chemicals made by Down Under Chemicals nine months after the decision was made to enter this business by licensing. After two years and with the White Industries' manufacturing facility in place, White Industries started producing industrial cleaning chemicals. The parties decided to extend the sales agreement for six months for some of the products, so that White Industries could ease into manufacture more gradually.

The White Industries story is typical of arrangements of this type that are taking place all the time. Companies looking to grow by licensing technology identify the technology of interest. If, as in the case of White Industries, the new products represent a diversification, the company looks for commercially proven technology because, not being familiar with the business to which the technology pertains and lacking experience with the technical field, the company is not able to judge the potential of unproven technology and cannot afford the risk of basing a new business on unproven technology.

By comparison, a company seeking to expand its existing product line can be interested in either commercially proven technology or unproven technology. It is able to assess the merits of unproven technology falling within its technical expertise and the risk of predicating a new product on this technology is acceptable. If we revisit White Industries years after it has become an established manufacturer of industrial cleaning chemicals, we see that it is in a good position to acquire unproven new technology pertaining to industrial cleaning chemicals because now, after years of experience with such products, it is able to judge the potential of such technology. With the acquisition of such technology, the emphasis will be on the proprietary position of the technology being acquired, namely, patent protection and trade secrets, because White Industries needs little technical assistance in a business in which it is established.

For the most part, I have told the White Industries' story from the perspective of the buyer of the technology. However, for every buyer of

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technology there is a seller and, therefore, the prospective buyer, especially one who initiates things as White Industries did, must determine very early why a prospective licensor is interested in licensing its technology. Down Under Chemicals was interested because of the two-year sales agreement and the long-term licensing income that would be generated from sales in a market in which it did not participate and had no plans for doing so.

The search for the technology and the prospective licensor is dependent upon the nature of the technology. When searching for commercially proven technology, the identification of prospective licensors is fairly straight-forward. They are the companies already producing the products of interest.

When searching for technology that is unproven, identifying prospective licensors is likely to be more difficult because the public's exposure to such technology is not nearly as great as to products that are already on the market. Typically, the sources of unproven technology are individuals, universities, independent R&D companies, the U.S. government, corporations having by-product technologies that for various reasons are not the basis of a business, and consultants or brokers representing a party having technology available for licensing. Technologies available for licensing can be located in databases or published listings or often are exhibited at technology fairs. Fortunately for prospective buyers of technology, many parties interested in licensing their technology will be the ones who initiate things by approaching the prospective buyers.

Once contact is made and there is an initial indication that the parties are interested in making a deal, the prospective licensee must assess the technology and determine if the prospective licensor has the wherewithal to provide technical assistance if that is important. If the patent position of the technology is important, the prospective licensee should arrange for a study and analysis of the scope of coverage afforded by the patents and of the validity of the patents.

Negotiation of the terms of the license can be simple or complex depending on the nature of the arrangement, and quick or protracted depending on the experience and skills of the parties. Except for the subject matter of the negotiation, negotiation of a technology license is generally similar to the negotiation of other business transactions.

LICENSING OUT: ALPHA-BETA MEDICAL INSTRUMENTS

Alpha-Beta Medical Instruments is a successful young American company that produces a line of proprietary medical monitoring equipment. Alpha-Beta management recognized early on that there were both domestic and foreign markets for the Alpha-Beta equipment. Alpha-Beta management also recognized that Alpha-Beta could not afford to establish foreign manufacturing facilities during its initial growth. Nor could Alpha-Beta devote the management time, effort, and attention required to establish and operate foreign marketing, sales, and service organizations through which it could sell its equipment made in the United States.

Alpha-Beta decided to do something about exploiting the foreign markets. Alpha-Beta approached two established and well-known manufacturers of medical equipment, Gamma Medical Products in France and Delta Medical Products in Japan, with proposals that the two companies enter into sales agreements with Alpha-Beta to market, sell, and service in Europe and the Far East equipment made by Alpha-Beta in the United States.

Delta Medical Products was interested in such an arrangement and entered into a sales agreement with Alpha-Beta. Gamma Medical Products was more interested in making and selling the Alpha-Beta product line under a license from Alpha-Beta, rather than selling units made by Alpha-Beta. Alpha-Beta, on the other hand, being a manufacturer, preferred to make and sell products, rather than simply receive licensing income. After considering a number of alternatives and the possibility that Alpha-Beta might lack the capacity to meet the needs of both Delta Medical Products and Gamma Medical Products if both were very successful in operating under sales agreements, Alpha-Beta decided that the best way

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to proceed in Europe was to grant the license requested by Gamma Medical Products.

The license agreement was predicated mainly on the grant of exclusive rights under the European patents of Alpha-Beta directed to the Alpha-Beta product line. The transfer of product drawings and product specifications was also included in the license. Being a long-time producer of medical equipment, Gamma Medical Products needed little more to introduce and market the Alpha-Beta products under its own trademark.

As a result of the license agreement with Gamma Medical Products, Alpha-Beta received substantial licensing income and the only effort required, besides negotiating the license agreement, has been the collection, copying, and delivery of product drawings and specifications. Of major importance to Alpha-Beta was the large up-front payment received from Gamma Medical Products that made it unnecessary for Alpha-Beta to obtain outside funding for a new product research and development program.

In the license granted by Alpha-Beta to Gamma Medical Products, the European patents that covered the licensed products were the most important part of the license to Gamma Medical Products. Because of these patents, Gamma Medical Products was the only company that could produce and market these products in Europe. It obtained and continues to enjoy a proprietary position with these products.

Gamma Medical Products, being an established supplier of such products, did not need any assistance in the design, manufacture, and marketing of the licensed products. The product drawings and specifications were included in the license to faciltate introduction of the products in the new European market. Gamma Medical Products saved time and money because it had these materials, but it could have succeeded without this know-how. The drawings and specifications did not add appreciably to the knowledge base of Gamma Medical Products and, therefore, were of limited value to them.

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