RECOMMENDATION 2
Benefit from the Intellectual Property of Others—Legally

The second recommendation is: be open and alert to what your customers, competitors, and others can offer you in terms of intellectual property. One of the big changes in intellectual property is the fast growth of possibilities for building your business in part on the intellectual property of others. The primary way to do so is to license it directly. But there are other ways too. The most promising approach comes from the field of open innovation.

Sometimes there are limits to what you can license from others. For instance, the intellectual property’s holder might simply refuse your offer to partner with them or grant you a license. Most of the time, that’s their right. There also might be limitations on how extensively big organizations can license their intellectual property rights to one another under antitrust laws. This area of law—at the intersection of intellectual property and law
as well as policy relating to competition—is highly complex, changing quickly, and hotly contested. For my purposes here, suffice it to say that there might be a limit to what you can do with licensing if the effect could be viewed as anticompetitive.

You can always try to license someone else’s intellectual property to use it in your own business. But what can you do with the intellectual property of others when you don’t have—or can’t get—a license? The answer sometimes is “nothing.” In other cases, however, you might consider some interesting approaches, which may prove helpful to your business.

The strategic questions to ask are: Where is innovation happening, and how can my organization make the most of it—whether or not my own employees come up with the insight? Might it make good business sense to share nicely?

The most profitable form of building on the intellectual property of others may prove to be participation in a development process called open innovation. Customers are increasingly showing that they’re willing to give you intellectual property that you can use to your benefit. Customers are open to participating in the design process for products that they love, whether a mountain bike, Web browser, camera, or shirt. The term “beta testing,” initially popularized in the IT sector, is now commonly used across business and nonprofit sectors as a key part of the innovation process, involving customers and benefiting from
their knowledge. Your customers are self-interested, just as your organization is: customers who help to improve a product through their feedback not only feel good about helping out but also get the benefits of that improvement in their everyday lives once they have paid you for it.

Companies in highly diverse fields have exploited the ideas, knowledge base, and enthusiasm of their customers. These companies range from IBM (conducting online “Innovation Jams” where clients, consultants, and employees’ family members tinker with its technologies in pursuit of new ideas), to LEGO (whereby LEGO has “outsourced” innovation responsibilities for its Mindstorms projects to a panel of knowledgeable customers and “citizen developers”), to PETCO (partnering with Bazaarvoice to implement customer ratings and reviews on PETCO.com along with an automated feed of negative and customer-service reviews to the customer-service team in order to identify and respond to their influencers; as the review volume rose, PETCO.com noticed that reviews were lowering returns for several products).1

Build on What Others Are Doing When They Offer It Up Broadly

Google’s search system is built on thousands of machines running the open-source operating system called Linux.
Whenever we use the World Wide Web, we rely on intellectual property that Tim Berners-Lee came up with—and then didn’t seek payment for our usage. Examples of building on the work of others, especially in the IT space, are legion. You don’t always have to own all your own code to create extraordinary businesses. And the benefits of building on someone else’s code can benefit all parties involved.

The biggest opportunity for this type of development is on the Internet. A key element of the recent explosion in Web development known as Web 2.0 is a phenomenon whereby companies open up their systems to make them interoperable with systems that others develop. Much of the time, organizations will not offer a negotiable license but instead will present opportunities for anyone to come along and take advantage of aspects of their intellectual property. These companies—ranging from Google to Amazon to Facebook—freely offer the opportunity to develop systems that build on and can be integrated with their intellectual property.

Intellectual property law protects many of Google’s services. At the same time, Google lets all comers use aspects of that intellectual property to build further. The theoretical concept, introduced by Harvard Law professor Jonathan Zittrain, is called generativity. The idea is that one company offers a certain layer of the Internet to others to keep building on top of or alongside it. Generative tools are ones that enable others to generate the next set of innovations.
Take Zillow, for instance. It is an online real estate database that appraises property values using publicly available data (e.g., property tax valuation, historic sales data, recent sales, market comparison information, and per-square-foot cost data). Zillow also uses Microsoft’s Virtual Earth mapping technology and bird’s-eye view photography to allow potential home buyers to more clearly see architectural design, landscaping, neighboring properties, and other factors. Essentially, Zillow is a “mashup” site: by employing freely available Web technology and publicly available information to create a powerful and functional user interface, Zillow has created an innovative proprietary system of its own. You don’t always have to create all or even most of the IP to make a profitable venture (in the Web services space, anyway).

The most explosive growth story in the Internet and mobile communications business today is driven by customers and third parties collaborating to develop a platform controlled by big software companies, like Facebook and Apple. Apple has cleverly tapped into the creativity and enthusiasm of iPhone users and software developers at large, creating the iPhone Development Center to spur the development of iPhone, iPod, and iPad applications. The applications are in turn sold through the Apple iTunes Store.² Hundreds of millions of applications have been sold, generating significant revenues for both Apple and independent developers—and helping to sell yet more
hardware, as customers seek the best devices to access the applications. Google’s platform for developing applications for its Android phones is even more open than Apple’s environment for iPhone development. Livescribe, the makers of the Pulse Smartpen, has taken a similar approach to increase the functionality and marketability of its product.3

This is the phenomenon of the Open Application Programming Interfaces, or Open API. The idea is that multiple players participate in a broadly open ecosystem of developing, using, and refining computer applications as well as the data that flow between them. These APIs enable organizations to offer access to their platforms without taking enormous risks or offering much in the way of support. From the perspective of those who develop on these platforms, APIs can provide important shortcuts that help avoid reinventing the wheel on the way toward offering customers breakthrough products. There are good reasons why Facebook wants people to develop highly creative applications that can reside on its system, why Apple and Google encourage smartphone applications, and why Microsoft wants people to develop applications that run on Windows or use its .net development platform. The network effects that can emerge are enormously valuable to Facebook, Apple, Google, and Microsoft. Those who have been slower to enable others to build on their
platforms—such as RIM, in the smartphone market—are scrambling quickly to catch up with the leaders.

For all the excitement of this mode of development and growth, there are risks involved. When one organization offers access to its systems to others, that organization may experience unforeseen outcomes. From the perspective of the organization that relies on the Open API, it runs the risk that the organization offering the service (say, Facebook, Apple, or Microsoft) might unexpectedly pull the rug out from under them. The promise of this emerging ecosystem is tremendous, but the full implications of this mode of interreliance remain to be seen.

**Encouraging Other People, including Your Customers, to Do It for You**

The “social Web” environment online is the best example of these kinds of emerging ecosystems. A large number of organizations—big and small—are codeveloping a world that consumers are flocking toward in large numbers. The phenomena of YouTube, Facebook, Twitter, and Google are all building off one another. Each of these organizations offers opportunities to integrate your intellectual property with their intellectual property in ways that stand to benefit both organizations.
This dynamic—the “combining [of] internal and external ideas as well as internal and external paths to market to advance the development of new technologies”—is core to the idea of open innovation.\textsuperscript{5} It is occurring in a subset of fields, but has application for many more areas than those that are currently exploiting it. Recent advances in IT have made the frictionless sharing of experiences and lawyer-free integration of platforms possible. As with anything new and promising, there are risks involved. But the rewards are also terrific.

The idea behind open innovation is as simple as it is powerful: the creators of new ideas don’t have to be within your organization in order to be helpful. Traditionally, businesses have been loath to listen to the ideas of people who didn’t work at the organization—a reluctance that was partially grounded in a fear of future demands for compensation on the part of customers proffering those ideas. A growing number of businesses today are open to ideas that customers and others freely send their way. The possibility of a breakthrough product or tweak to a service that helps you maintain the distance between you and your competitor is growing.

Consider Procter & Gamble. In years past, it kept its product development processes highly secretive and rarely interacted with outsiders until a product hit the shelves. Today, its external affairs manager is encouraging inventors to call up with new product ideas.\textsuperscript{6} GE Plastics has
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taken a similar route, regaining profitability and global market share by encouraging customers to create as well as share their own custom colors and finishes.\(^7\)

On the Web, this process is even more common. When Microsoft was about to roll out a new version of its Web browser, Internet Explorer 7, the product team released it in a public “open beta” process to its customers. Microsoft got valuable feedback from a wide range of customers, which it then incorporated into the final version of what turned out to be a strong product. A similar process took place with Google Wave, a product that allowed users to have online conversations and work on shared documents in real time. Google asked users to preview Google Wave, suggest improvements, and vote on the suggestions of other users. Zillow—whose autogenerated “Zestimate” only approximates what the market will bear for a given property—encourages its users to update facts about their homes or neighborhoods in order to increase its accuracy and usefulness.

Eli Lilly recognized that the Internet presented the opportunity to tap into the innovative potential of individuals and groups all over the world. It started InnoCentive (now an independent organization) to draw on the wisdom of the crowds. InnoCentive allows a company to post problems to which it would like a solution (known as “challenges”) to its Web site. “Solvers,” who number almost 180,000, compete to win cash “prizes” offered by the com-
pany posting the challenge. In this way, a company taps into a broad “inventor pool for which it can pay for value in generative innovative work while acquiring the IP rights as part of the purchase.” Roughly 900 challenges have been posted so far by some 150 organizations, including big multinationals such as Procter & Gamble and Dow Chemicals. Nearly half—about 400—have been solved.

Pets have been the beneficiaries of open innovation, too. To determine how it should make, package, and sell dog food, Del Monte Foods created a private online community called “I love my dogs/Dogs are people too.” Through this forum Del Monte heard the desires and concerns of dedicated pet owners, offered them examples of potential products and product packaging, and incorporated these suggestions and criticisms into a successful line of dog “breakfast” food.

In the fashion world, Spreadshirt has created a global apparel company by letting its customers design the clothes they buy. Spreadshirt provides its customers with a well-designed Web infrastructure and custom-manufacturing expertise, and from there its customers (which include other Web sites, CNN, other clothing companies, and individual consumers) can determine just what clothing Spreadshirt will produce, and on what scale. Spreadshirt’s business model makes sense: if you let customers decide what they want for the same cost as having them choose what’s available (off a rack), they’re certain to choose their own design,
or at least one they feel they can claim. Spreadshirt’s innovative team also actively seeks to reinforce its customers’ feelings of ownership over the company’s products and development. For example, Spreadshirt “crowdsourced” its logo (created a contest whereby it would select its logo from designs submitted by users) and sponsored monthly design contests. Spreadshirt profits directly from the creativity of its users while building deep connections to the community that is excited about its products.

Why are customers willing to help? Self-interest is a core motivation, of course. Many people enjoy creating things, and feel empowered when they are rewarded for doing so. That’s one of the core lessons of the explosion of Web 2.0 services and the user-generated content movement online. But people also want better products. Many people think they know better than you do. So let them try. And maybe they are right. You still have to sift through their ideas, and then figure out which ones to listen to and which ones to incorporate. You remain the boss. But an open innovation strategy can lead to important refinements to products and services as well as ideas for entirely new offerings.

Such a strategy can also help your brand image. Microsoft, for example, ran advertisements for Windows 7 that emphasize the operating system as customer driven and customer responsive (the commercials end with a customer saying, “I’m a PC, and Windows 7 was my idea”). The appeal to connect to its customers in these advertisements is
obvious. The strategy seems to have worked, as adoption of Windows 7 and the public reaction it received far outstripped the troubled Vista release that preceded it.

The Fair Use Economy and Material from the Public Domain

Sometimes the law permits you to use aspects of the intellectual property of others without an explicit license. Most intellectual property regimes have what are called “exceptions and limitations,” especially with respect to copyright law. Under US law, for instance, there are certain fair uses of copyrighted materials. This section of the law is complicated and fact specific. In order to know if you can make fair use of someone else’s copyrighted materials, you have to consider a four-factor balancing test. Copyright experts joke that fair use is “the right to hire a lawyer.”

To build a business on the intellectual property of others is to be a high-wire artist. The service MP3.com managed the act for a short while and then fell hard to the ground, as did various peer-to-peer file-sharing services that facilitated broad access to copyrighted music files. Google and its subsidiary YouTube, by contrast, continue to soar. Google has its own core set of intellectual property, to be sure, from which it sets itself apart from competing search companies. But it also has no business without the existence of all the copyrighted material on the Web.
around the world. YouTube, too, does not develop its own copyrighted video content. It provides a service for others to post video and associated audio content online. In crucial respects, both of these companies rely on the explicit or implicit right to supply a service on top of the aggregated intellectual property of many others. That’s not to say they haven’t been challenged: both Google and YouTube have been sued by a raft of major and minor companies for copyright violations—and so far, they’ve been successful at making the case that their core practices are legal.

There are other limitations to intellectual property rights that may be relevant to your business interests. For instance, rights in intellectual property tend to run out over time. This is true with respect to patents, which often have particularly short terms. Copyrighted materials fall into the public domain after a somewhat longer period as well. Trademark-related rights fail from a lack of continued use in business.

Some business models build on this intellectual property that has become the property of the public. Generic drug organizations contend that they saved US consumers $734 billion over the past decade alone. Leading members of Congress, such as Representative Henry Waxman, have called for extending rights to organizations that make biogenerics and curbing the rights of the pharmaceutical giants. Again setting aside the politics, there is a vibrant industry that produces goods and services for consumers
based on the intellectual property of others. Law reform in patent might improve the prospects of such organizations over time.

This phenomenon may be especially true for companies looking to expand internationally. Sustained critiques of the impact of patents on access to lifesaving drugs in developing countries are likely to affect international and domestic laws as well as norms regarding patents in the medium to long term. Developing countries increasingly employ domestic compulsory licensing laws (and this use has been explicitly suggested and condoned by the World Trade Organization, among other international bodies), and countries like Canada and India engage in significant international trade in generic pharmaceuticals. Commentators have called for more radical changes, such as instituting a prize system here in the United States whereby the government pays pharmaceutical companies a prize for their developments instead of granting them patent rights, or using “Equitable Access” licenses whereby patented information is available for free use in certain contexts.\(^{12}\) As the ability of pharmaceutical giants to enforce their intellectual property in foreign markets wanes, generic producers will likely see increased opportunities to use the propriety information of others.

Even large, established biotechnology companies are getting into the act of sharing intellectual property. In a sharp break from past practices, Novartis and Merck
have both established units to develop generic versions of drugs. The notion, for Merck, is to develop “follow-on biologics” that compete with its competitors’ best-selling drugs. Merck’s plans include a first product, an antianemia drug, set to launch in 2012, with at least five other generics on the market by 2017.13

In the content business, this strategy is even easier to observe. Lexis and Westlaw make billions of dollars per year selling access to high-end databases to lawyers and others interested in understanding the law. A key part of what they sell is an excellent package of tools and enhancements that help researchers and lawyers find as well as interpret the US government’s laws—all of which are, by statute, in the public domain. Dover Publications sells print media that is otherwise in the public domain. Disney has made millions, if not billions, of dollars by repackaging traditional stories in the public domain into modern classics. Disney does far more than Dover by adding its magic to the story rather than simply reprinting the original text. But in both cases, the premise of working from public domain material is the same.

Another way to think about fair use and the importance of public domain materials, taken together, is the overall benefits that the reliance on this doctrine provides to the economy at large. The fair use economy is comprised of the series of economic actors who rely on the use of the copyrighted materials of others to provide goods and
services to their customers. The best examples are Internet companies, such as search engines, that enable their customers to find information that others have created and render advertisements that are relevant to those who are searching for that information. Other instances of institutions that rely on fair use include device manufacturers that enable people to make lawful copies of the copyrighted works of others. According to a recent study commissioned by industry groups, the fair use economy in the United States supports hundreds of billions of dollars in exports, employs millions of people, and is growing by 5 percent a year or more. These fair use economy companies, the study’s authors contend, have grown at a rate that far exceeds that of companies in other industries in recent years.

The strategy of using intellectual property in the public domain or based on fair use is not relevant for every business. Yet it emphasizes an important, larger point: the extent to which organizations might benefit from looking beyond the knowledge amassed by their own employees in seeking to get a profitable service or product to market.