

Part IV

Implementing a Major Innovation

The 5th Wave

By Rich Tennant



"Take it easy. It's a nice idea -not a fourth 'M.'"

In this part . . .

Your ideas deserve proper implementation because without good implementation, they may not succeed. Implementing something well means getting people excited about your ideas and plans and helping them figure out how to use your new methods or inventions. Most good ideas fail to get implemented, so take this step seriously and budget some time and effort to making sure your ideas come to fruition.

In this part, you get help with building networks, teams, and coalitions to move your projects forward. You also address the challenges of protecting all your intellectual property so that you can maximize the success of your unique contributions. In addition, I show you how to take the ball and run with it yourself as an innovative entrepreneur.

Chapter 15

Managing the Development of an Innovative Idea

In This Chapter

- ▶ Managing innovation with a step-by-step plan
 - ▶ Organizing and managing the development team
 - ▶ Building a network of partners to help with development and implementation
 - ▶ Introducing your innovation
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My fifth child was born a week before I wrote this chapter — a healthy girl named Eisa — and as the family gathered to greet her, someone pointed out that her lips were chapped. “Blisters,” my wife corrected. “From nursing.” Indeed, new babies get blisters on their lips, and it seems like you ought to do something for them, but nobody sells a product for the purpose. My eldest son, Eliot, said, “Why doesn’t somebody sell a product called Baby Balm?” Why not? My wife, Deedee, pointed out that natural lanolin might be a safe product to use. Within a few minutes, we had identified a need, coined a catchy brand name for a product, and decided what to make it of. Great!

But we still haven’t marketed Baby Balm because manufacturing and selling it aren’t as simple as imagining it, and I doubt that we ever will. I’m an author and consultant, not a manufacturer, so it’s not a great match with my business. If it were, though, I’d need to formulate and test the product, obtain approval to sell it from any relevant regulatory authorities, select a contractor to manufacture it, design an appealing and functional package, line up retail distributors, and launch it with an effective marketing campaign. As with most innovations, there would be many steps involved in implementing our idea.

This chapter addresses the tough challenge of implementing an innovation, whether it’s a new product, process, or any other design or idea. Studies show that more innovations fail because of poor implementation than because of bad ideas. Protect your good idea from failure by implementing it carefully and well!

Planning the Innovation Process

You need to understand a process to manage it, which means deciding on the likely length of your innovation process, the stages it will go through, and the results you expect at each stage. Create a simple plan of action containing steps, a timeline, and some measures of performance. Hand out copies, and post one of the copies prominently in your workspace. This document, simple as it is, will guide you through the innovation process and let you know when your team slips off track.

Some of the biggest and most successful innovative organizations use a general innovation process as a template to help them plan each project. (For a good example, see Procter & Gamble's innovation process in the section "Emphasizing planning, preparation, and refinement," later in this chapter.) If you do a Web search for "innovation process," you'll find dozens of results, some of them for processes with just a handful of steps, others more elaborate and complex. Which is correct? None, actually, because none was developed specifically for your organization and process.

You'll need to adapt a generic multiple-step innovation process for your particular project, adding or modifying the steps until they capture everything that you think you'll need to do to achieve success. As a starting point, use the generic innovation process shown in Figure 15-1, an all-around model that captures the main management stages of almost every innovation process. Don't stop there, though. Add detailed substeps within each of the four main stages to customize it to your specific project.

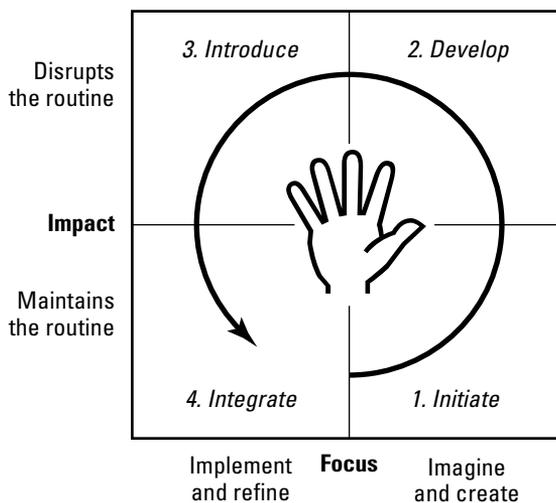


Figure 15-1: A cyclical four-step diagram of the innovation process.

Figure 15-1 shows Hiam's Innovation Cycle. Yup, this is the way I draw the innovation process for my students and clients. I symbolize innovation with an outline of the human hand, because human hands, with their opposable digits, give us the capacity to make tools and build things with them, thereby making us the innovators on our planet.

The figure also shows innovation as a cycle, not as a linear process. The idea is that the end of one process should lead to the beginning of another. Don't stop innovating just because you have a success. Use the momentum from that success to start another project.

In addition to planning the process stage by stage, you need to keep a close eye on progress, and be prepared to respond and adjust when things go wrong. What can go wrong will go wrong, as the old saying goes, so you need to anticipate possible problems and have contingency plans in place. Knowing the common hazards of implementation prepares you to navigate them. The following sections examine the six things you must do to control the most common sources of trouble.

Being flexible about the design

For starters, you may find that your idea, design, or invention doesn't work as well as — or in the way that — you expected. Design problems and unintended consequences are common, but they need not derail your project entirely. The trick is to assess and evaluate continually so that you can catch flaws in your design while there's still time to correct them.



Learning as you go is the secret to good implementation. Don't be pigheaded and insist on sticking to the original plan if it's not working as planned. Stop, rethink, and revise.

Clarifying the goal

Poor goal definition is a big cause of implementation disasters. Ask yourself exactly what you're trying to accomplish, by what date, and how you'll measure success and failure. Develop a detailed written statement of your objectives, along with measures or indicators of success. Break success into waypoints or check-ins along the way so that you'll know whether you're on track and won't have to wait until the very end to find out that you have a mess.

Clear goals add the discipline you need to make your implementation run smoothly; they keep you focused and moving in one clear direction. Without clear goals, nobody knows just what he should be doing, and often, people work against one another by trying to move the innovation in their own competing directions.

Communicating early, often, and widely

Make sure that you communicate regularly with everyone who may be important to the implementation, because poor communication derails a lot of innovations. Spread information about the innovation, including progress reports, expected effects, and what help you'll need at each stage.



Keep in close touch with anyone who controls information that you and your implementation team may need. A good rule of thumb is to talk every week to every person who might be important to the project.

Emphasizing long-term benefits

When people feel that they need to pursue their immediate interests, they often get in the way of implementation by resisting change. It's important to keep them talking and thinking about longer-term benefits. In the long run, every employee and department is part of the overall organization, and an innovation that's good for the organization can be good for every member of it. The big-picture idea is that a rising tide lifts all boats. Watch out for knee-jerk, defensive, short-term reactions, and try to keep the dialogue focused on the medium distance rather than the immediate.

Monitoring the results

Poor monitoring of results is a big factor in many failures. Make sure that you have regular progress reviews, either in person or through detailed written reports followed by phone conversations to review them (if it's not feasible to meet in person).



After you choose your criteria for evaluating success, stick with them! Often, people get so committed to the idea of succeeding that they let their standards slip, and they refuse to fail an innovation when it doesn't meet benchmark measures. It's great to be emotionally committed, because commitment means that you'll work hard and be a creative, persistent problem-solver, but try not to let your commitment cloud your judgment. Sometimes, you simply have to pull the plug and admit that the plan didn't work out as expected. Persisting beyond reasonable evidence of success is just plain foolish, and tight monitoring of results can prevent it.

Building strong implementation teams

Implementation almost always takes a group of people to make it happen. But as you probably know from your own (perhaps painful) experience, teams

don't always work smoothly and well. Some teams have a real shortage of teamwork because managers don't build teamwork simply by telling people that they belong to a team. You have to provide a sense of unity and shared purpose.

Teams need to be established and managed over the life cycle of the implementation process. See the next section for details on making your teams tick.

Innovating in Teams

The lone inventor may be a heroic figure in common folklore, but in fact, almost all innovations are developed by teams. Sometimes, an existing — and well-functioning — team already exists and can simply take the new idea and run with it. More often, you have to form an appropriate team and manage its development at the same time that you manage the development of your innovation.

Maintaining momentum through the four stages of the team's life

Here are the stages of team development:

1. Charter the team.

Identify the need, obtain authorization, and invite members.

2. Build the team.

Create momentum through purposeful goals. Your team members will be motivated by exciting goals and will feel eager and enthusiastic to achieve them.

3. Structure the work.

Establish work assignments, plans, and milestones.

4. Finish the work.

Iron out any problems, and make sure that the innovation is functioning properly at full scale.

Unfortunately, developing and managing a team is a separate duty from managing the development of an innovation. Teams are chartered and managed for many purposes, not just for innovating, and whenever you have a project team, you need to manage it through these four stages. To manage the team through all its stages, you need to form it with an eye to the diverse membership that will make it productive in every stage.

Tapping into diverse contributions by team members

Different people bring different strengths to a team. After all, that's the big idea behind teamwork, isn't it? As you charter your team, try to anticipate the various strengths and skills you may need, and seek team members who cover all your needs — including those with sufficient authority to access needed resources.



Round out your team with people who are dissimilar. Diversity adds initial complications as you work to unify your team and build strong morale, but as soon as you get the team up and running, that same diversity becomes a tremendous asset that gives the team a wide range of perspectives to tap into.

In addition to the normal range of human differences — experience, expertise, background, and so on — you need to have a range of creative styles. Different creative styles ensure that you have people who are good at the four main types of tasks that a project team has to perform:

- ✓ **Exploring:** Creative thinking, questioning, probing, and provoking
- ✓ **Energizing:** Motivating, engaging, encouraging, and supporting
- ✓ **Structuring:** Organizing, planning, tracking, and evaluating
- ✓ **Finishing:** Completing, checking, transitioning, and terminating

Human nature being what it is, most people are good at only one or two of these roles. The trick is making sure that your team has a range of people, each of them naturally good at one of the four roles. Including all four roles is the most important thing to think about in team building, aside from the inclusion of people who have appropriate expertise and authority.



The Team Roles Analysis assessment instrument (see www.tspectrum.com/team_roles.htm for ordering information or www.supportforinnovation.com for a summary) predicts team role behavior quite accurately, based on the simple insight that creativity and extraversion combine to determine how people behave on project teams. For example, someone who is open to creativity and also extroverted has the temperament of an Energizer. The following list shows how each role is based on these two dimensions of personality:

- ✓ **Social-creatives** are extraverted and creative, and perform the Energizer role with ease.
- ✓ **Individual-creatives** are introverted and creative, and make natural Explorers.
- ✓ **Social-logicals** are extraverted and analytical, so they find it easy to Organize the work of others.
- ✓ **Individual-logicals** are introverted and analytical, and make great Finishers because they stay on task and aren't happy until the goal is achieved.

As you form your team, think about what expertise you'll need, what authorities might be helpful, and how to cover all four of the team roles by including people who fit these four descriptions.

If you know the people in question and have worked with them before, it will be obvious who is creative or analytical and who is social or individual. (If not, give candidates a Team Roles Analysis assessment as part of their screening.) Look for all four combinations of these traits. If you're lacking a role on your team, recruit someone to fill it, even if that person lacks specific expertise in the project, because the project won't get finished unless you have all four roles represented on your team. (Don't say I didn't warn you.)

Finding your strongest team role

Are you a creative Explorer who's great at imagining things in the early stages of a project and can provide the vision and creativity to bring the team's work to life?

Are you an Organizer who excels at planning, coordinating, and tracking the work of team members?

Are you an Energizer who enjoys communicating with team members, and brings enthusiasm and excitement to the team and its mission?

Are you a Finisher who's focused on the ultimate goal and won't be happy until it's achieved?

A team needs all four of these roles. Sometimes, one person can cover more than one role, but often, it works best to let different people play different roles. Knowing your own strongest role (from experience or by taking the Team Roles Analysis questionnaire; refer to the preceding section) will help you see how to contribute to the interpersonal dynamics of the team. Whether you're the team leader or one of the team members, you ought to step to the forefront when your strongest role is needed.

Self-awareness of your strengths is important to good team contributions. Bring your technical expertise and your personal strengths to the team by understanding what you have to offer and then talking to the team about what you can contribute. Get the others to think and talk about their strongest contributions, too. A team is greater than the sum of its parts if — and only if — all members share their greatest strengths, not their greatest weaknesses!

Determining what the team leader needs to do

To succeed as team leader, you need to ask yourself a simple question each day: “What does my team need to succeed?” Then make sure that the team gets what it needs to the greatest extent possible. Whatever the team’s needs are — tangible resources, technical help, or intangible things like encouragement and optimism — you’re responsible for helping the team get those things so that it can keep working productively and well.

To assess your team’s ongoing (and often changing) needs, ask yourself whether you need to do work for your team in any of the following seven areas, which come from my *Team Leadership Inventory* (published by Trainer’s Spectrum at www.tspectrum.com):

- ✔ **Team formation and maintenance:** Establish and cultivate the team, such as by holding a morale-building celebration of progress.
- ✔ **Boundary management:** Manage the barriers to teamwork, such as by intervening with a team member’s department head to get permission for her to attend more of the team meetings.
- ✔ **External communications:** Make sure that the team communicates fully throughout the organization and with innovation partners beyond your organization.
- ✔ **Internal communications:** Encourage the team members to communicate openly and freely with one another, such as by holding regular progress briefings.
- ✔ **Team vision:** Make sure that the team understands and stays focused on its main mission.
- ✔ **Performance management:** Keep team members on track through clear assignments and progress check-ins.
- ✔ **Member and leader development:** Seek new information, and build skills.

Use these seven team needs as a checklist for reviewing your team’s status, and put effort into any of them that seem to be lacking. A deficit in internal communications, for example, can derail a project quickly. Many implementation efforts fail because the team doesn’t function well, not because of any fundamental flaw in the innovation itself. Don’t let team dysfunction ruin your innovation!

Considering a skunkworks to protect your team from interference

Sometimes, a development effort is so intense and difficult that a normal team can’t do it, and you need to create a super team with a high degree of

focus and intensity. If the level of difficulty and effort is much higher for your project than it is for regular work in your organization, you may need to isolate your team to maintain a level of exceptional performance. Set up a highly protected, innovative team in an isolated area for those really challenging projects that ordinary teams can't accomplish.

Skunkworks are development or implementation projects that are handled by a team with a secret agenda working in isolation from the rest of the organization.

The term is used generically by many people in business. The term Skunk Works, however, is actually protected as a trademark by the aerospace company Lockheed Martin Corp., where the term was first coined, so if you're a consultant who wants to offer services for setting up such teams, you'd better find your own name. Lockheed Martin's first Skunk Works team, established in 1943, developed the P-80 Shooting Star jet fighter in record time under the pressure of wartime needs. If you're working on a new jet fighter, you should follow all 14 of the official Lockheed Martin Skunk Works rules at www.lockheedmartin.com/aeronautics/skunkworks/14rules.html.

For a less-intensive (and secretive) project for general business purposes, the spirit of the approach is pretty well captured by these guidelines:

- ✔ Give the team leader considerable control and autonomy.
- ✔ Give the team an ambitious goal and plenty of resources to pursue it.
- ✔ Define clear specifications for the outcome so that the team knows exactly what it's supposed to produce.
- ✔ Let the team work intensively and without interruption.
- ✔ Minimize outside communication to prevent criticism and negative thinking.

A highly autonomous, isolated team working in secrecy isn't a good idea for most innovation efforts, but it may be helpful if you have a self-sufficient group of experts who are highly motivated to do something that's so out of the ordinary that it would be difficult to do in the regular work environment.

As for keeping the work secret, unless you're working under security restrictions (as Lockheed Martin often does under military contract), the only practical contribution of secrecy is to reduce external criticism and prevent outsiders from holding you up by restricting your resources. If the team emerges from isolation with a well-developed invention that's ready to use, resistance may never be an issue, and the rest of the organization may embrace the work.

If the invention requires adaptation on the part of other people, however, it might be wise to give them detailed briefings early in the project, rather than spring the results on them later as an unpleasant surprise. Secrecy is a

double-edged sword: It gives the project team a greater sense of safety and unity, but it also slows the recruitment of partners and the spread of information during implementation. Because of these negative consequences, skunkworks teams aren't advisable for most innovations, but they're great for innovating in an intensely creative, driven manner within a less-creative larger organization.

Building Development and Implementation Networks

A strong development team is a powerful thing, but it may not be sufficient to get your innovation all the way off the ground. Often, you need resources outside your team — resources that you can't really afford to bring inside your team by hiring more people or that simply can't be hired in. That's why a network is usually part of the implementation process.

Think of the inventor as being the core, with the development team arranged in a tight circle around him or her. The network of partners that you build forms a wider circle surrounding and supporting the development team. Beyond the network is the wide world in which you plan to implement the innovation. The network helps support the team's work and also builds a bridge to the people you need to adopt your innovation.

Networks vary from temporary to established. You may be able to tap into your existing personal, professional, or commercial networks for help with your innovation. Alternatively, you may choose to create a network specifically to aid your invention or development processes; start by examining all your existing networks to see whether any might be helpful to you. By tapping into existing networks, you may be able to ramp up to collaborative activity more quickly because the relationships already exist.



The people and organizations in your existing networks are motivated to help you because they may provide help to return a favor that you've done for them (or will do for them). You may run into resistance to innovation within existing networks, however, because their members often have a stake in how things are traditionally done and may resist your efforts to introduce change.

If you need to create a new network to help you develop or diffuse your innovation, start by identifying people, teams, organizations, and/or institutions that may see some benefit in collaborating with you. When you invite these people or groups to participate, make the potential benefits clear and specific. In other words, tell all the parties what's in it for them.



A partnership approach to cleanup

Like many other U.S. cities, Wichita, Kansas, faces a problem: cleaning up old industrial sites where groundwater is contaminated by tetrachloroethene (used to dry-clean clothes), trichloroethylene (used to clean metal parts), and other chemicals. To simplify the cleanup process and reduce its cost, city engineers were eager to try innovations such as the use of bioremediation and reactive walls rather than conventional pump-and-treat methods and hydraulic control rather than aquifer restoration. Any treatment that minimizes the amount of soil and water that a city has to move is good because it's cheaper, but deciding to try new treatment methods is one thing, and actually implementing them is quite another.

For starters, federal regulators have to be convinced that alternative approaches will work, so a careful technical analysis has to be performed to sell the concept. Then the work has to be funded. Wichita uses a tax increment district (TIF) to raise funds. Inside the TIF, property taxes are frozen, and as the cleanup work goes on and property values rise

because of it, the city taps into some of the increased land value to help it secure bonds used to raise funding for the work.

In addition, the city of Wichita offers liability releases for current property owners to get them on board with the program by removing their fear of costly lawsuits.

To pull off a major remediation project, Wichita typically builds an informal team that includes neighbors, property owners, and the engineering firm working on the project, as well as banks that provide help with financing. The success of such projects depends on the skill with which city officials build partnerships to sell, fund, and implement their innovative approach. The term that they use for all that coalition building and cooperative planning is *partnering*, and it's the most important element in a successful cleanup.

For more information on this case, see the Human Sciences Research Council's description at www.engg.ksu.edu/HSRC/97abstracts/doc59.html.



Members of networks tend to collaborate because each member sees a benefit from collaboration, but it's important to recognize that each party may be pursuing slightly different benefits. You may need to balance these differing goals and protect your innovation from the potential for conflict and competition that these goals represent.

Launching the Innovation

The baby bird must eventually leave the nest. Will it be ready to fly? Only if you anticipate its needs and problems, and make sure that it's ready for the rough-and-tumble world beyond the protected boundaries of your development team.

Emphasizing planning, preparation, and refinement



Procter & Gamble's system for launching a new product is a pretty good one for just about any innovation. It consists of the following six steps:

1. **Discovery:** This step is the research stage, in which creative ideas are developed.
2. **Design:** Concepts are turned into prototypes, and detailed planning is done to refine the concept and prepare it for implementation.
3. **Qualify:** This step involves a thorough analysis of the market potential, risks, and potential rewards to make sure that the design is strong enough to be worth launching.
4. **Ready:** Designs that make it through the qualification step are prepared for launch.
5. **Launch:** This step is actual rollout of the innovation, which is often staged so that an initial test can be performed and the details of the launch plan refined before the innovation goes national.
6. **Leverage:** Successfully launched products are studied to see how they can be refined by improving their management and introducing efficiencies to cut costs.

The take-away lesson from P&G's innovation process is that half the steps — Steps 4 through 6 — are dedicated to getting the launch right. The idea of a specific step called Ready is great! I want you to incorporate a similar step in your management of innovations. Take time to assess the needs and barriers to implementation or launch, write a launch plan, and make sure that you know what resources you'll need.



With careful preparation and planning, the Launch step goes much more smoothly, but nasty surprises sometimes occur. Flaws are revealed in the design, unintended consequences are discovered when people start using it or you find more resistance and less understanding than you'd expected. That's okay. Just return to planning and adjust your approach based on the feedback.

I also love the idea of a Leverage step. This is a great term for the process of refining and maintaining the implementation. When your launch is over, it's easy to take your foot off the gas pedal and sit back, but avoid this temptation; it's not time to rest yet! A successful launch is just the beginning of a new process. It earns you the happy opportunity to refine your design and perfect your production and marketing or other specifics of the implementation. (See Chapter 16 for ways to maximize the spread of your innovation.)

Promoting the project

Whatever your innovation is — a new idea, such as getting nurses to use hand sanitizer before touching a patient, or a new consumer product, such as a P&G launch — you need to put careful attention into telling your target market about the innovation. Promotion is always integral to a good launch.

Promoting the project means building support within your organization and throughout the network of business partners you're going to need to implement the innovation. You've got a variety of ways to go about building support and participation for the implementation. Use all your options to influence others to help you, including communicating the details of the innovation, explaining how to use it, and providing support for those who are struggling to use it for the first time.

Communicate

Tell the story of your innovation simply and well, cutting through the complexities and getting to the benefits so that people understand right away. Communicate often, and communicate with everyone who has a stake in the innovation or in the old ways that have to be discarded to implement the innovation. Your role as a communicator is important. Don't forget to tell and retell the story of your innovation, pointing out why it's important and good.

Explain

Share expertise and information to fill in missing knowledge about how to implement the innovation. Often, innovations have a technical aspect, and people may resist implementation simply because they don't understand the technology. Help by teaching and by bringing in other teachers who have even deeper expertise than yours. Filling the knowledge gap is a key part of implementing any innovation.

Authorize

If you're in a position of authority, use your positional power to get your subordinates in line and working on the implementation. Redefine their roles and duties as needed to make sure that they're pulling the innovation forward. In addition, talk to others with authority, and get them on board too. Make sure that those in positions of power give out the needed assignments to move your implementation ahead.

Negotiate

Identify the people and groups inside your organization and beyond it who need to be part of the implementation process. Open friendly negotiations with those parties to get them to agree to do their parts. Pull any political strings you may have, and call in personal favors if need be, to align the right implementation partners for your plan.

Support

Offer encouragement and empathy as needed for anyone who's having trouble or experiencing uncertainty and doubt. Implementation can be a rocky road, and you may need to keep spirits up by using your relational skills. It's helpful for people to know that you care, not only about the innovation, but also about them!

Projecting the rate of adoption

Along with the timeline and budget for your development work, you need to make a projection of the spread of your innovation, because this timeline is important for your planning. If you develop a new, stronger, food-grade inner bag for use in boxed packages of cereals, cake mixes, and the like, your projection of the rate of adoption by makers of those food products will tell you how quickly to ramp up your production of the bags. You don't want to overproduce inventory or overinvest in manufacturing equipment, but neither do you want to come up short. Chapter 16 shows you how to project the *diffusion curve* (the rate of spread of your innovation).

Chapter 16

Spreading the Word to Diffuse Your Innovation

In This Chapter

- ▶ Developing a sound strategy for spreading your innovation to all potential users
 - ▶ Using appropriate media at each step of the diffusion process
 - ▶ Using giveaways to speed the diffusion process
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Diffusion is the sometimes-difficult process by which a good new idea or invention takes hold and spreads throughout a social network, which could be your market, your industry or profession, or even an entire country. Understanding how ideas, inventions, and innovative products spread is essential to your success as an innovator. Often, it's not the best design that wins the day, but the best-promoted design. You need to know how to spread the good word and get everyone excited about using your innovation to ensure its ultimate success.

This chapter shows you how to maximize the chances of success for your new idea by taking advantage of the natural pattern of diffusion.

Strategizing to Spread Your Innovation

The term *diffusion* comes from chemistry, in which it refers to the movement of particles through liquids or gases. High school science classes demonstrate diffusion by releasing a drop of perfume in the front of the room and then seeing how long it takes for the scent to reach every desk and student. (Not long.) Most innovations, however, encounter far more resistance than perfume does as it passes through the air, so you must master innovation marketing to make sure that your innovation gets the recognition and success it deserves.



Brushing up on history

Did you brush your teeth this morning? I did. Everyone does, right? But brushing one's teeth is a relatively recent thing in human history. Toothbrushes were invented in the 1600s in China, from whence they spread slowly, carried by travelers to Europe and Japan. The early toothbrushes were expensive, handmade from bone handles, with natural boar bristles inserted into drilled holes in the handles and held in place by tiny wires. Before the early 1800s, people mostly used toothpicks rather than brushes, and their teeth decayed at an alarming rate.

Toothbrushes didn't catch on in America until the mid-1800s, when the first patent for a toothbrush design was issued in the United States. (It was awarded to H. N. Wadsworth in 1857.) The biggest moment in the history of the toothbrush, however, came in 1866, when Florence Manufacturing Co., in the town of Florence, just a few miles from Amherst, Massachusetts, where I'm sitting as I write this chapter, began to produce a mass-market

toothbrush under the brand name Pro-phy-lac-tic (and yes, it was actually spelled that way, with four hyphens — branding has gotten more savvy since then!). The mass-produced toothbrush caught on when the price became affordable and advertising spread the word about it, and the company did very well.

The toothbrush finally took off in the United States more than 200 years after its invention because the Florence Manufacturing Co. was already advertising its hairbrushes and was familiar with the emerging practice of advertising in newspapers. A mass advertising campaign helped diffuse the toothbrush innovation by making people aware of it.

This toothbrush example illustrates the need for widespread communication with target users to spread an invention broadly. You need a strategy to spread your innovation too — ideally, one that gets the word out in fewer than the 200 years it took for the toothbrush to become an everyday household item!

Identifying potential adopters

The people who will use your idea or buy and use your invention are the *adopters* of your innovation. Who are they? How numerous are they? What will it take to get them to try your invention? The more insight you can gain on your future adopters, the better, because you need to figure out how to hasten the rate at which they adopt your innovation. First, though, it's important to get a good idea of the scope of your potential market (the number of people who are likely to adopt your invention) by asking yourself these questions:

- ✓ Is it something that the average household or person could afford to buy and/or use?
- ✓ Is it something that a typical (as opposed to big) business could afford to buy and/or use?
- ✓ Does it compete with multiple alternatives, or does it stand alone as a unique invention?

The size of your potential market is reduced if your innovation is highly specialized — something that most people or businesses wouldn't ever need. Consider an example from my own experience.

Over the holidays one year, my daughter Sadie made a gingerbread house decorated with frosting and candy from a kit sold at the grocery store. It looked great, but it fell apart because the roof and wall pieces were plain rectangles that had to be held together with frosting, which isn't the most durable of construction adhesives. So I drew up a design for gingerbread pans that would interlock via dovetail joints and would be more structurally sound.

What's the potential market for this invention? Hmm. I could calculate it by counting households that

- ✓ Have young children
- ✓ Do arts-and-crafts activities at home
- ✓ Celebrate Christmas
- ✓ Can afford to spend money on specialty pans
- ✓ Like to cook

According to the U.S. Department of Commerce, there are about 115 million households in the United States. Wow, I'm going to be a millionaire! But wait — only 78 million households have children, and of those, about half don't have children younger than 18 living at home. I don't expect many teenagers to want to use my gingerbread-house pans, so I'm going to cut that number in half to target households with young children.

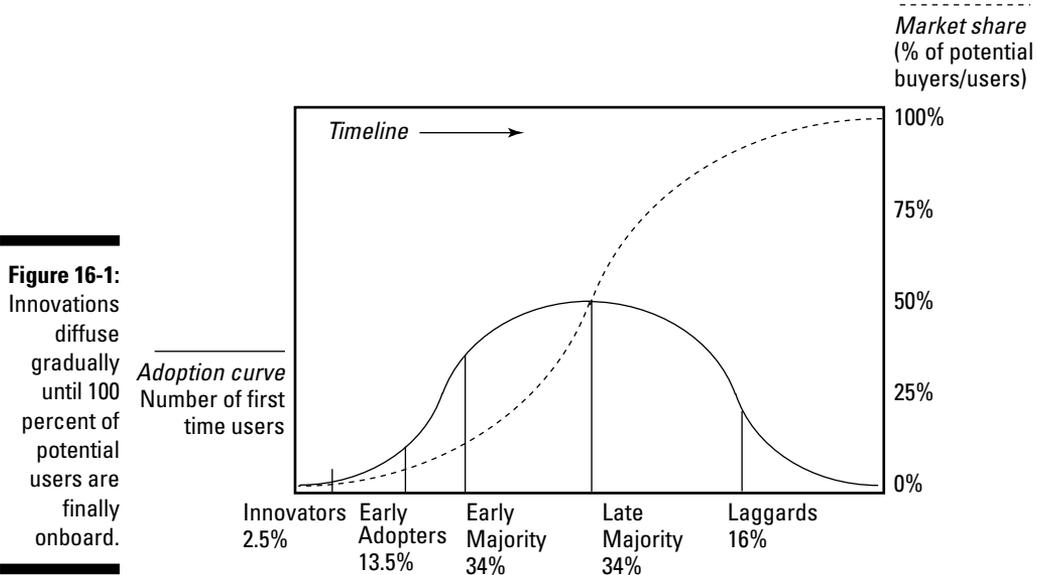
Now my target market has dropped to around 25 million households — still a good number but certainly less than I first thought. I have to cut it again when I consider that some households with young children don't go in for traditional Christmas activities like making gingerbread houses, and some of the ones that do aren't going to feel like spending money on specialty pans. Then I have to cut my estimate farther because some of the remaining households don't do much cooking.

I'm down to a market of about 10 million households now. Maybe I won't become a millionaire from this invention after all. In fact, I may not be able to sell it through mainstream grocery stores because the potential market is too small. Almost all households buy potato chips, for example, and they buy them year-round. My invention — a specialized set of pans for making better gingerbread houses — is used only once a year by at most 10 percent of households, so unlike potato chips, it probably isn't worth the shelf space from a grocery store's perspective. I'll have to market my specialized baking pans some other way, such as via a targeted direct-marketing campaign using e-mail and a Web store.

Working through the mental exercise of analyzing the potential market for an invention tells you a lot about who might use it and how widely it might eventually spread or diffuse, but you still don't know how fast it will diffuse. The pace of diffusion is also a key strategic consideration, and I discuss it in the following section.

Finding out how fast your innovation will spread

If your invention is a good one — and I assume that it is! — you can expect it to spread at some natural rate. That rate may be quite slow, however. It's amazing how gradual the early spread of a good idea or invention often is, as you see in Figure 16-1, which shows the typical diffusion curve for an innovation.



As Figure 16-1 shows, on average, a small fraction of the potential user base for any innovation actually adopts it early on. Only 2.5 percent of potential users are innovators who embrace new ideas and products quickly and eagerly. Another 13.5 percent are so-called early adopters, who are fairly open to innovations and willing to try them after a few innovators have taken the first plunge. The third group to adopt an innovation — the early majority — is a bigger group, and when you reach those people, you're assured of establishing your innovation.

Diffusion usually follows an S-shaped curve, like the solid line in Figure 16-1. Without special help from you, that curve may be a very stretched-out S with a gradual slope that spreads out across years. The length of the diffusion is related to several factors that you can consider as you make your best guess about the speed of spread:

- ✔ **An innovation that depends on other innovations (such as a supporting technology) may have to wait until the related technology spreads.** If your invention is a fold-out portable keyboard that turns a phone into a fully functional word processor, your market will be limited by the speed at which cellphones with large, easy-to-read screens and powerful processors are embraced by people who do a lot of writing.
- ✔ **An innovation that requires a significant change of behavior will spread more slowly than one that fits into existing behaviors.** The treadmill, for example, allowed people to run in their homes or at fitness clubs. People who already ran outside found it easy to adapt to the new machine, and it spread quickly. The cross-country skiing machine spread much more slowly, however, even though it offers a better all-around workout than a treadmill does. The problem is that most people don't already ski cross-country, so the motion is unfamiliar to them.
- ✔ **An innovation that is costly to make will probably have a high price tag until economies of scale are reached.** High initial cost is a big barrier to adoption and slows the diffusion curve significantly.
- ✔ **An innovation that is costly to adopt is doomed to slower adoption than easy-to-use innovations.** It didn't cost very much for you to switch from music CDs to digital downloads, for example, because you could get free software and use your existing computer to download songs. You can't use your existing computer or television set, however, to watch movies in ultra-high-definition (UHD) — an emerging standard that's expected to become available in the next five years or so. Existing monitors will have to be replaced by models that produce resolutions four times higher than today's high-definition monitors, and the new monitors probably will be quite expensive at first. Expect a slow, forced march to UHD, with many consumers resisting because of the cost of switching over.

Setting the strategic parameters

When you've identified the likely first users and the ultimate user base, you can see the diffusion path fairly clearly. Add your analysis of any barriers to diffusion (such as high cost) to get a general idea of whether the innovation will spread slowly or rapidly.



To refine your timeline, look for comparisons with innovations that have had a similar effect in the past, such as an earlier-generation technology. Also look at contemporary innovations and how fast they're spreading to the same user base. This information gives you a clue about whether adoption curves are

getting faster. Technology-based consumer innovations, for example, spread more quickly now than they used to because consumers are increasingly savvy about and interested in new technologies.

When you have a general sense of the timeline of spread and know who will be adopting the innovation when, you can draw your own diffusion curve showing specific estimates by year, based on the generic one shown in Figure 16-1 earlier in this chapter. Treat this curve as your base projection, assuming a natural rate of diffusion; then ask yourself what you can do to speed the pace of adoption above the natural rate.

I don't know about you, but I'm usually pretty impatient to get people to recognize and try something that I've created, and I'm also eager to get market share before someone else does, so I like steep diffusion curves and very rapid adoption rates.

Targeting those early adopters

It's best to hasten the diffusion curve by reaching out to enlist innovators and early adopters right away. (I explain early adopters in the section "Identifying potential adopters," earlier in this chapter.) To refine your strategy for spreading your innovation, ask yourself a couple more questions about the potential user base or market for your innovation:

- ✓ Who is most likely to want to try something new right away?
- ✓ How can I reach out to inform and excite these innovative users who like to be the first to try anything new and forward-thinking?

By aiming communications at innovators and early adopters, you can jump-start the diffusion process and make sure that it gets momentum fairly quickly. Often, you can use standard marketing methods too, but you'll be aiming at the most innovative and daring of your potential customers, so you need to choose your message and your media with them in mind. (See my book *Marketing For Dummies* [Wiley] for more information on designing a marketing program.)

Signing up beta testers

Beta testing is the initial trial use of an invention or process by a small group of sophisticated users. One good way to get early adopters to try your innovation is to give away samples (see "Priming the Pump with Freebies," later in this chapter) — but not just to anyone. Focus your trial offers on those people or organizations who have a proven track record of embracing the new and are suited to beta testing your innovation. It's okay to confine your beta tests to those on your short list and not to make the offer to the public.



Getting community leaders onboard

Back in the 1970s, government social workers in northern Finland were frustrated that people seemed to be unwilling to change their diet and lifestyles to reduce the risk of heart disease, which was a major cause of death in the area. Public information campaigns involving advertisements and educational brochures didn't seem to have any effect. People were set in their ways — which included a sedentary lifestyle and a diet including too much animal fat.

With the help of Everett M. Rogers, a professor at Stanford University and the world's leading expert on diffusion of innovations, a team of Finnish social scientists recruited 800 community leaders in North Karelia, a region of several hundred thousand people. The 800 lay leaders were invited to attend training sessions and were armed with in-depth knowledge of lifestyle changes that prevent heart disease. The group included people whom others

respected and looked up to as role models. Recent follow-up studies show dramatic effects. The innovative ideas about healthier living spread rapidly from the small core group, and the rate of heart disease in Northern Finland fell significantly over several decades — a fairly short period of time for a major improvement in public health.

Your goal may not be to prevent heart disease; it may be to persuade manufacturers to adopt your new technology or consumers to embrace your new product. The dissemination process is the same for both goals, however. Rather than spreading your advertising or publicity over thousands and thousands of people, try targeting only likely role models and leaders. Win a few hundred leaders, and you'll soon find that you have tens of thousands of followers onboard too.

When you start selling a product, you're required to be even-handed and consistent about pricing it, which means that special offers targeting only the privileged few won't fly legally. (To make sure that your pricing approach meets legal requirements, check with your corporate lawyer first.) But in the initial testing stage, before you're selling it to the market as a whole, you can usually be as selective as you want.



Your testing program can be more or less formal depending on how long and involved a test you need to perfect the product. Go for formality if you need sites where you can study users as they adopt a software program, for example, so that you can set up a way of recording bugs and observing user behavior. Be more informal if you simply want to get a bunch of people to try something new.



A Dutch bulb breeder contacted garden clubs in the northern United States with a request for volunteers to try a new, hardier variety of tulip bulbs. The feedback in the spring was very positive, with many gardeners asking for more, so the breeder introduced the bulbs into the region and launched a successful new product line.

Recruiting informal champions

Find people who act as informal leaders, or *champions*, and persuade them to be the early adopters. How? By giving them individual attention, free samples and support, or special education on using the innovation. This method works surprisingly well. You can recruit your champions face-to-face or (if you're good at Web marketing) by targeting bloggers who have lots of followers and Facebook members who have lots of friend requests.

Designing Your Media Mix for Maximum Diffusion

Your *media mix* is the selection of advertising and other marketing communications you use to inform potential users about your innovation and (hopefully) persuade them to buy and use it. You can't just do what you see marketers of established products doing, because their marketing mixes don't have to spread the word about something innovative. Your mix needs to be more informative than those of established products, and it also needs to narrow the message to those most likely to take an early interest: the innovative, early adopters who will be first to buy something exciting and new.

Aiming for intelligent, sophisticated buyers

As you expand beyond the first group of beta testers, look for innovators and early adopters who have a track record of embracing the new. If you sell other products through salespeople, then you probably can introduce your new product through your salespeople, too. If you don't sell directly, then you'll need to advertise. Either way, aim for people who are most likely to buy an innovative product — the sophisticated, innovative customers who have a track record of embracing new technologies and ideas.

Letting your sales force select the innovators

In a relatively small business to business market, you may already know who the early adopters are: the businesses that are leaders in their markets and have intelligent, sophisticated buyers. Your sales force or sales representatives can identify the top 15 percent of their customers based on how open-minded and innovative they are, and you can design a special informative sales presentation to tell them about the new product.

Using an indicator to pull innovators out of a larger list

What if you're targeting a larger, less-well-known market, and you don't know who the most open-minded customers are? This situation is a problem when you're launching a new consumer product, for example, because the United

States alone has millions of households, and it's pretty hard to find a list broker that identifies them based on how innovative they are as consumers. To get around the problem, identify a marker of innovative consumer behavior that you think fits your situation. Something relatively new that fewer than half of consumers or consumer households have bought will help you identify those whose past behavior indicates that they are open to something new.



The 25 percent of U.S. households who had high-definition television (HDTV) at the beginning of 2009, for example, are more likely to upgrade to 3-D TVs in 2010. Companies planning to launch 3-D TVs in 2010 can look to HD early adopters as their initial target market. With that clue, manufacturers can identify the best states and cities in which to test the market for 3-D TV. Using their own sales records or widely available consumer research by firms such as Nielsen, companies can identify the cities with the highest percentage of HDTV users and focus their initial promotion of 3-D TV there. Washington, D.C., for example, is an innovative market, and a third of households there had HDTV at the beginning of 2009. Compare that city with Detroit, where a fifth of households had HDTV at the start of 2009, and you can make a pretty good guess about where 3-D will diffuse more rapidly.

Emphasizing personal media in the early days

In addition to personal selling, educational workshops and press interviews are good ways to spread the word during the early stages of diffusion. They work well because they give you opportunities to speak directly with people who are interested in your innovation. Advertise an educational workshop — possibly a free one — about your innovation. Send out a press release or, if the innovation is really newsworthy, hold a press conference to let the media know about your innovation and the workshop you're holding.

Working with opinion leaders or lay leaders who in turn spread the word through their personal networks is also a great strategy. There's more of an educational element to the communication in the first stages of diffusion, so personal approaches to communicating make the most sense.

Using industry events to find early adopters

Go to conferences and trade shows (see Chapter 10) where you can present your innovation and talk to people who find it interesting. These events gather many of the most forward-thinking people in an industry — just the people you should be talking to and sharing samples, demos, and spec sheets with.

Using social media to generate electronic chatter about your innovation

Social media can be your best friends during the launch of an innovation. Blogs, professional online newsletters, technical and professional chat rooms,

and broad-spectrum platforms such as Facebook (www.facebook.com) are all great places to generate a buzz about your innovation. If you're not already part of the online conversation in these places, find someone who's comfortable with them to help you begin to communicate about your innovation.

Blogging and being blogged about

Bloggers are an especially powerful force for spreading the word about an interesting innovation. Spend some time scanning for bloggers who might be interested in your innovation because it's a match with the kinds of topics they've covered in the past. From these potentially hundreds or thousands of bloggers, cull the ones who have only a few readers, and focus on those who have high readership (at least 100 followers). Get in touch with the leading bloggers to let them know about your innovation, and ask them whether they'd like to try it. If some of the most popular bloggers start talking about it, the news will rapidly spread among their readers.

Offering "show and tell" in streaming video

If your innovation is interesting to watch in action, get some early users on digital video, and post (or, better yet, have them post) one to three minutes' worth of footage on YouTube (www.youtube.com).



The *if* in this advice is important. If your video is dull, it won't get noticed, so this strategy isn't very interesting for, say, a new book. Who wants to watch video of someone reading a book? Video is great for promoting a new toy, however, and many toymakers have learned that an informal product review by a friendly customer (often, the son or daughter of an employee) will generate interest.



It's also helpful to post video of your product prototype and ask for input. Not long ago, I came across a video posted by the inventors of a tabletop device that uses hand-operated paddles to bounce a ball back and forth in the style of the old Pong computer game. I wouldn't have guessed that this design would attract much interest, but with 90,489 viewers (well, 90,488, if you don't count me!), it obviously is generating some enthusiasm. Comments posted on the site included helpful suggestions for making the design better, because it had a small problem: The ball sometimes got stuck in the middle, out of reach of the paddles. With that many viewers and lots of friendly advice, the designers of the tabletop game just might have a winner.

Figure 16-2, however, shows the curve of cumulative viewers of this tabletop game video plotted by day over the course of two weeks. You can see a healthy S-curve of growing interest in the first week, followed by a leveling-off of the curve. That tells you that the audience for this video is probably going to max out at around 100,000 viewers, which is good but not outstanding.

A video that *goes viral* — meaning that it diffuses broadly and rapidly in Web communities — shows a longer upward slope to its curve as it reaches millions of viewers. From the data in Figure 16-2, you can guess that the

tabletop game would have a dedicated but limited audience if it were introduced to the market. Keep in mind, however, that YouTube viewership is a reflection of how entertaining the video is, which may or may not be directly linked to how interesting the innovation shown in the video is. A second, more entertaining video of the same game might succeed in going viral.

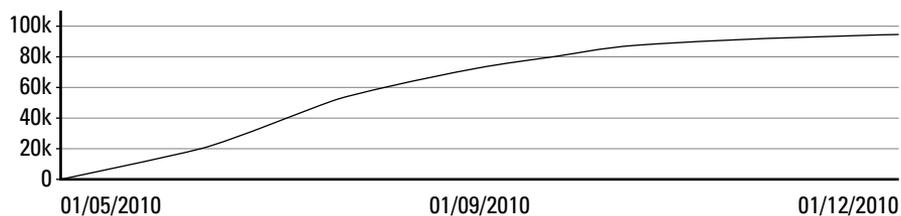
What if the inventor made a video called *War of the Pong Nerds*, in which two players argue about who's winning and, halfway through the game, knock the game off the table and start to fight about the score? The idea is silly but potentially the stuff of YouTube legend. And if you can become legendary on YouTube, you can probably make it in the mass market out here in the real world, too!

Posting informative videos about technically intriguing products

Companies have discovered that a boring but informative video approximately two minutes long will win viewers on YouTube if it's about a new and interesting product. As I write, microprojectors using light-emitting diodes (LEDs) as their light source are entering the market, and 3M has a video about one such microprojector that's had more than 100,000 views.

The video isn't good theater; it simply shows a salesman making a presentation to a prospect, using a microprojector. Why have so many people watched it? Forward-thinking consumers who are eager to try new technologies go looking for product information, and YouTube is an accessible place to find it.

Figure 16-2:
An S-curve indicating how interest in a prototype video on YouTube grew and then leveled off over a two-week period.



Adapting your marketing to the inflection point

At some point, your innovation reaches the *inflection point* in its diffusion curve — the point where the line begins to slope upward at growing speed. Innovative products don't sell at the same rate next year as last year. As

these products approach the early middle half of the market (where the most progressive of the average users or consumers adopt the innovation), sales should pick up. The inflection point comes none too soon for many innovators, who have been struggling to build the market and reach economies of scale in production and marketing.



Knowing where you are in your innovation's diffusion curve helps you project sales realistically. The curve also helps you decide what media to emphasize as you promote your innovation. As you reach the inflection point, where your sales begin to go up at an accelerating rate and you've penetrated more than 13 percent of your potential market (refer to Figure 16-1), switch gradually to less personal, more mass-oriented media to spread the good word about your innovation. Try the following techniques:

- ✓ Billboards and transit advertising, which are cheap and good places to start a mass-marketing campaign
- ✓ Advertising on local and cable television stations
- ✓ Banner advertising on mass Web sites such as Yahoo, Google, YouTube, and MySpace
- ✓ Mass mailings to purchased lists of potential customers (send postcards or catalogs, depending on the depth of your product line)
- ✓ Promotions in mainstream media such as newspapers, magazines, and radio talk shows

If one in ten consumers has tried an exciting innovation, you can be fairly sure that the other nine have heard about it and want to find out more. Publicity and advertising can combine to meet your need for information. As more people become familiar with the innovation, the news value goes down, and you'll get less editorial coverage, which forces you to buy more advertising to stay visible.

Priming the Pump with Freebies

Some innovations lend themselves well to free sampling. If you have a new product that isn't too expensive to make on a per-unit basis but has significant startup costs, consider doing a big initial run and giving most of it away. This strategy may speed the diffusion of your innovation and get you quickly to that inflection point, where sales start to grow at a rapid rate and profits are easier to come by.

Normally in business, you try to avoid giving your product away, but when you need to stimulate the diffusion of an innovation that nobody's heard about, the opposite advice may apply. Sometimes, the product is its own best advertisement, and your marketing money is best spent by giving away product.



One of my clients is an inventor who created and patented the SmoothClip, a clever molded-plastic device that clips onto the bottom of a tube. Different sizes fit different tubes, from lip gloss to body lotion, allowing you to push the product up the tube and out the end easily and smoothly, with little waste and mess. It's a great design. How do I know? My client has given away a lot of the devices, and everyone who has one loves it and tells all of his or her friends to get one, too. The clips aren't even available in stores yet, but they already have a following.

Suppose that the SmoothClip is your innovative product. My advice is to make the injection molds — the biggest upfront cost — and then do a run of several thousand items just for giving away. If you hand out the clips in a large, fashion-forward urban market (Los Angeles would be great), packaged so as to display the brand name and a Web site for ordering, you'll probably get lots of orders from that giveaway, and the diffusion process will have been started. You may have to sell through sampling, personal demos, and the Web site until the diffusion curve reaches its inflection point. By then, you'll have a good enough initial user base to attract the interest of major retailers.



If you're considering trying a major sampling effort or other ways of getting people to try your innovation for free, make sure that you really have a large potential market that's worth investing in upfront. If your research indicates that 60 percent of women and 5 percent of men frequently use cosmetics in tubes and are likely to want your new clip to help them control the application of these products, you can project a potential market of roughly 65 percent of the adult population. That's a nice fat market with plenty of potential to repay your initial investment in free samples. It's safe to say that you could give away 10,000 clips to stimulate the diffusion of your innovation, because you ought to be able to sell hundreds of thousands of units when the product catches on.

Chapter 17

Protecting Intellectual Property

In This Chapter

- ▶ Identifying, valuing, and tracking your intellectual property assets
 - ▶ Protecting your work with copyrights and trademarks
 - ▶ Patenting inventions and designs to limit your competition
 - ▶ Keeping trade secrets
 - ▶ Securing essential records and documents
-

I*ntellectual property* includes the innovations and other creative expressions of your ideas that you own — assuming that you manage and protect them appropriately so as not to lose control of them. You can — and often should — pursue legal protection of inventions such as process and product designs. You also should copyright your writings, videos, audios, and images, whether you're producing them for sale or using them for advertising or other nonsale purposes.

What about your business name and logo, and the names and visual identities of your products? It's essential to protect your claim to your own brands, too, especially if you plan to invest in marketing them and making them memorable to potential consumers.

Your intellectual property — whether it's a unique invention, a how-to booklet, or a brand identity — has economic value, and the reality is that someone else may try to take it. Unless you apply for patents, file for copyrights, and register for trademarks when and how you should, you may find that what you thought was yours isn't, and you have no legal recourse when someone else starts using it.

Understanding the ins and outs of intellectual-property law and practice is essential to the successful implementation of innovations, whether you're a lone inventor, an entrepreneur seeking funding, or an employee taking the lead in developing a new product, process, trademark, or any other expression of creative design. This chapter helps you get a start on identifying and managing your intellectual property, but you will probably need to get professional help from a lawyer who specializes in intellectual property, because it does get quite technical and I can't cover such a detailed and

broad subject thoroughly enough in a single chapter. If you want to read more about the topic, turn to *Patents, Copyrights, & Trademarks For Dummies* by Henri J. A. Charmasson and John Buchaca (Wiley).

Determining and Keeping Track of Your Intellectual Property Assets

What do you have that might qualify as valuable intellectual property? Most businesses have a lot of intellectual property (sometimes referred to as IP) to protect, and sad to say, they usually don't take proper care of that property. Intellectual property could be even more valuable to your business than hard assets like trucks, equipment, and buildings. Intellectual property is a major asset, and so you may want to seek expert advice from an IP attorney as you assess your IP and decide what needs protecting.

Deciding what merits protection

Here's a checklist of some of the main kinds of intellectual property. If you, your business, or your employer has any of the following, you need to have a strategy to protect their value:

- ✓ Secret formulas, recipes, or processes that competitors may want to get their hands on
- ✓ Inventions, including designs for products and processes that you think may be original and of commercial value
- ✓ Ideas for inventions that haven't been fully designed yet but that you think may be worth developing further because they could be original and valuable
- ✓ Designs that you think are exceptional and recognizable and that you wouldn't want competitors to copy
- ✓ Written works, including fiction and nonfiction (such as this book), whether long or short, that you think are original and of value
- ✓ Works written for performance, such as musical, dramatic, or choreographic works
- ✓ Pictorial, graphic, or sculptural works of artistic value
- ✓ Motion pictures and other audiovisual works, including television and streaming video ads and short videos
- ✓ Brand names that are distinctive and associated with your business or products and that you wouldn't want competitors to use

- ✓ Logos or visual symbols that are distinctive and associated with your business or products and that you wouldn't want competitors to use
- ✓ New varieties of plants that you developed and want to sell without competitors or customers reproducing them on their own
- ✓ Business records and files, including records of past and present projects and products, that you'd be unhappy to lose to theft, fire, or other disaster



What would you pay for the Coca-Cola formula and name, for example? A lot. It's the most valuable brand in the world, and it pretty much *is* the company. Protecting this asset is key to the success of the company. Most business people wish they had intellectual-property problems as big as Coca-Cola's: how to keep someone from stealing the formula and how to police the trademarks associated with the brand. These problems are billion-dollar problems because of the value of the assets involved.

Assessing the value of your intellectual property

After you list your intellectual property, you need to think about the value of each item on that list. Three common ways to value IP are

- ✓ **Estimate what price you could get by selling the IP.** To estimate a sales price, look for similar intellectual property that's been sold recently and use any examples you find for comparison. IP is often sold; companies license or purchase patent rights to inventions as well as brand trademarks. If you have trouble finding good examples to help you value your IP, ask an intellectual property lawyer for help.
- ✓ **Estimate what you may earn by using the IP over the next five years.**
- ✓ **Calculate what you've invested in the IP.** If you have good records of what you spent to acquire or create the IP, valuing it on a cost basis should be easy.



An accountant may be able to help you value your intellectual property; the accountant's approach is usually based on cost — what you've invested in the intellectual property.

Which of the three methods is the right one for valuing your IP? It depends on who you talk to and what the value will be used for. If you're selling your IP, then fair market value is your guide, even if it's less than what you invested. For listing IP on a balance sheet, your accountant will usually use a cost basis. But for deciding which property to emphasize for protection and future investment, an earnings basis is best.

Calling the SWOT team

For especially valuable intellectual property, you may want to do a *SWOT* analysis, identifying *strengths, weaknesses, opportunities, and threats* to the asset. The SWOT analysis is a way to brainstorm and research specific factors that may affect the asset and your protection strategy for it. It looks at internal (within-company) factors and classifies them as either strengths or weaknesses. For example, if you produced a movie with a major star in it, that actor's market appeal is a strength for the movie. If, however, the movie got bad reviews because the plot is boring, then that's a weakness that may offset the strength.

A SWOT analysis also looks at external (marketplace, environmental, legal, and social) factors, and classifies them as either opportunities or threats. For a movie production company, for example, the sale of pirated DVD

copies of a movie in Beijing is an external threat, whereas the ownership of a really great script for a sequel to a best-selling movie is an internal strength.

To conduct a SWOT analysis, start by listing strengths of the IP in question, such as that there are many years of patent protection remaining, or that the design is unique and increasingly popular. Next, list weaknesses, such as a concern that an earlier patent might be similar enough to encourage the owner to file suit against you. Then list opportunities, such as an offer to license your design or an idea for combining it with another invention to make something that may be easier to sell. Finally, list threats, such as the rumor that an industry leader is working on an invention that might antedate yours.

Keeping track of the protective steps you've taken (or need to take)

After you've gone through the checklist in the earlier section "Deciding what merits protection" and gathered some expert advice from a qualified intellectual-property lawyer who's familiar with your industry, you should be able to create a detailed list of each piece of intellectual property that you (or your employers) own. Follow these steps to create a complete table of your IP:

1. Create a blank table with six columns.

You can create this table electronically by using the Table command in Microsoft Word or by creating a worksheet in a spreadsheet program such as Microsoft Excel.

2. Label the first (leftmost) column Our Intellectual Property, and use as many rows as necessary to enter its contents.

List each piece of potentially valuable intellectual property in this column.

3. Label the second column Protection in Place, and use as many rows as necessary to enter its contents.

Use this column to list any trademarks, copyrights, patents, secrecy practices and contracts, backups of data files, insurance policies, and any other forms of protection that are currently in place.

4. Label the third column Up to Date and Complete?, and use as many rows as necessary to enter its contents.

Don't just put checks or yes/no entries in this column; specify what's been done recently to ensure complete protection of each IP asset in your list. Often, when an IP audit gets to this step, many or all of these cells are left blank, because in far too many businesses, the intellectual property isn't managed on a regular basis (such as quarterly).

5. Label the fourth column Quality of Protection, and use as many rows as necessary to enter its contents.

Some of the IP assets won't have any protection, others will be under-protected, and still others will be well protected. In many cases, you won't be sure which label to enter for an IP asset because you won't be certain what can or should be done to protect it. That's okay. Just enter a question mark for that asset for now; then do your homework to find out what's appropriate and necessary to do next (see Step 6).

6. Label the fifth column Necessary Actions, and use as many rows as necessary to enter its contents.

Summarize the next steps needed, if any, to secure full protection for the IP asset.

7. Label the sixth column Value of Asset, and use as many rows as necessary to enter its contents.

For each asset, enter a dollar value (if you have a sense of what the market would pay), a loss value (if you have a sense of what losing the asset would cost you), or a general value assessment (such as low, medium, high, or very high). See the earlier section "Assessing the value of your intellectual property" for tips on how to set a price on each asset. Try to use a consistent method throughout your table to make it easy to compare the items based on their value.



Knowing the value of an asset helps you decide how much to invest in increasing your protection of it and also helps you prioritize your action plans. Most likely, you should focus on high-value, underprotected intellectual property first. Sometimes, however, a known threat to a specific IP asset exists, such as a copycat competitor, in which case you'll probably want to focus on that asset's protection first.

Copyrighting As Much As You Can

The easiest form of intellectual-property protection is the *copyright*, the exclusive legal right to reproduce, publish, sell, or distribute the matter and

form of something (as a literary, musical, or artistic work). This book has a copyright in the author's name (mine), which I've assigned to the publisher in a contract that gives Wiley the right to publish my work in exchange for royalties (payments based on a percentage of sales). Authors, musicians, and other artists know that they need to protect their work with copyrights, and so should businesses — but they often don't.



Even though filing for copyrights is easy, you may still want to get legal advice about what to protect with copyrights and how. You may be able to protect certain wording that's of value to your sales and marketing, unique computer code that you don't want copied, photographs and videos used in a trade-show kiosk, and many other forms of authored content.

Adding copyright protection to your work

The first thing to do with any original authored work is to post a copyright notice on it that conforms to the legal requirements for such notices in your country. In the United States, notices usually take this form: the word "Copyright" and the symbol ©, followed by the first year of publication of the work and the name of the owner of the copyright. By posting a copyright notice, you declare your claim of ownership of the work.



Is your Web site protected? I bet not! To help prevent your competitors from using content on your Web site, post a copyright notice clearly on key pages.

By publishing original content with a copyright notice (in a printed brochure or catalog or on the Web, for example), you gain significant legal rights. If someone later publishes something that's very similar and apparently derived from or copied from your materials, you can take legal action to force that person to withdraw the material, and if the other person profited at your expense, you may also be able to regain some of your lost profit.

You can strengthen your proof of authorship and be better prepared to defend your copyright by filing with the U.S. Copyright Office of the Library of Congress. Go to www.copyright.gov, and click Forms. On the Forms page, you can take a tutorial before filing electronically (which costs \$35 and is relatively simple and easy), or you can fill in Form CO on your computer and then print it and return it by mail (which costs \$50). Fill in the form entirely online and print it without making any edits, because the information on the form gets incorporated into a bar code as you enter it. It only takes a few weeks at most to complete the copyright process in the United States.

If you want to copyright a group of publications at the same time, there's another form for that, and you can still use an old-fashioned paper form for filings if you prefer.



The Web site for the U.S. Copyright Office of the Library of Congress contains lots of helpful advice, forms, and information, such as how to incorporate property copyright notices into your published documents and how to make packaging and licensing agreements for software, music, videos, and other authored materials. (If your content or authored product is of potentially high value, however, don't do it yourself; hire a competent lawyer to spearhead the effort.)

Getting copyright protection when you're not the author

If you hire employees or freelancers to write or design materials for your company to use, you may find that you can't copyright those materials, because you're not the author. To get around this problem, specify in advance that you're employing these people to create works for hire, and that they're waiving any and all copyrights and recognizing you as the owner of all copyrights pertaining to the work in question. Software companies routinely ask programmers to sign such releases of rights, and so do many magazines, newspapers, and other publishers that work with multiple authors.

Protecting Your Brands through Trademark

All businesses should have proprietary brands that add value to what they sell. A *proprietary brand* is a business name or other unique identity (such as a product name) that you own and use for your own benefit. If you purchase a branded product wholesale and then sell it retail, its brand name isn't yours, but if you make the product, you may give it a proprietary brand name of your own. Even if you don't control the brands that you sell, you certainly should protect the brand name of your business, whether it's a store or other kind of business entity.

Managing your brands is partly a creative challenge and partly a legal one:

- ✓ On the creative side, brand management involves the development of creative brand identities that are attractive, memorable, and trustworthy. Putting good creative effort into brand development pays off, and most businesses could and should do more of it.
- ✓ On the legal side, brand management involves a host of activities, from standardizing and describing your brand identities to registering for trademark protection in your own country and other countries (see the later section "Applying for a trademark in the U.S. and elsewhere").

- ✔ If you're establishing a new business, you should also register your business name with appropriate state and federal regulatory bodies. Some U.S. states require new businesses to file with the Secretary of State, while others send you to the nearest courthouse or town hall to register your name if you're a small, unincorporated business, while still requiring incorporated businesses to file at the state level. You also need to set up your business identity with the Internal Revenue Service and obtain a tax identification number for it. For marketing purposes, you should also buy a URL that incorporates the name of your brand for use on the Web. There's plenty of homework to do if you're setting up a new business, so talk to your lawyer and accountant, and consult a detailed reference such as *Entrepreneurship For Dummies* by Kathleen Allen (Wiley).



You may think that you can take charge of trademark filings and do everything yourself because the databases — and the forms — are online and easily accessible. Not so! If your trademark is at all likely to be valuable to you or anyone else, you ought to use a competent lawyer to spearhead the effort. There's a lot I can't explain in this section because it's complex and technical, and there's still more that I can't explain because trademark law is a specialty . . . not my specialty. You wouldn't take out your own appendix if you had appendicitis, and I don't think you should handle your own trademark legalities either.

Ensuring that your brand is trademarkable

When you develop or improve a *brand identity* (a name, logo, and possibly a tag line or other elements, presented in a specific manner both verbally and visually), you give a clear, distinct personality to your brand. (For help with branding and naming, see my book *Marketing Kit For Dummies* as well as *Branding For Dummies* by Bill Chiaravalle and Barbara Findlay Schenck [Wiley].) Whether that brand is a business, product line, or specific product, there's considerable value in a good brand identity.

A brand is worthy of a trademark if it meets these criteria:

- ✔ **It's consistent:** A consistent presentation is part of the strategy for protecting the brand's value. The more consistent you are in the way you show your brand, the stronger the brand will be. If you don't already have one, create a *style sheet* — a set of instructions with examples showing exactly how the brand name or company name is to be displayed everywhere it appears. (Graphic designers who develop brand identities are familiar with the requirements for style sheets and can help you create specifications for your brand.)
- ✔ **It's unique:** A unique brand is one that people can't easily confuse with any other. For example, if you want to introduce an air-filled plastic wrapping material made of recycled plastic, you might choose to call it EarthBubbles®, which differentiates it uniquely from its leading

competitor, Bubble Wrap® Brand Cushioning, a trademarked product owned by Sealed Air Corporation of Elmwood Park, New Jersey. You couldn't call your product Better Bubble Wrap or anything that uses the term "bubble wrap" because Sealed Air Corp. owns that trademark.

- ✓ **It's identifiable:** A brand name or logo design needs to be clearly, specifically defined, right down to the exact wording, the kind of lettering, the colors used, and other particulars, so that it's easily identifiable in every instance.



It's good to make sure that there is plenty of elbowroom for your trademark. Refine it with more specific language (such as a second term) if it's too hemmed in by existing marks.

Applying for a trademark in the U.S. and elsewhere

The U.S. Patent and Trademark Office in Washington, D.C., handles registration of trademarks in the United States. Go to its Web page at www.uspto.gov/trademarks for information on trademarks, searches, and registrations.

It's a good idea to seek protection of your trademark in foreign countries as well. The Madrid System for the International Registration of Marks makes it possible to register in many countries at the same time through a single filing with the World Intellectual Property Organization in Geneva, Switzerland (www.wipo.int).

Trademarks are granted for specific uses. Suppose that you want to register the name Orion as a trademark for a new line of handheld navigation aids for hikers and sailors. You would apply for protection for these uses, not in other categories. Your trademark might be similar to one in another category (a registered trademark for Orion Capital already exists, for example), but your request might still be granted if the proposed use is unique to your category.



To strengthen an application to register a trademark, make it more specific and unique. The name Orion isn't as easy to protect for a handheld navigation device as Orion Navigator, for example. Adding the second word to the name makes it truly unique. I can't find any products with that name by searching commercial and Web databases; I also can't find any U.S. trademark registrations in that name (see "Searching for existing patents" later in this chapter).

Similarly, Navigator is a relatively weak name for a handheld navigation device because it's fairly obvious (possible a generic term), and also because it's been registered as a trademark for a Web browser, an automobile, and other products. Even though these registrations aren't in the same category as your product, they might impinge on the perception of uniqueness in consumers' minds. Distinct and unique trademarks are the strongest kind.



That recognizable red cross

The American Red Cross has such a well-known name that it was able to raise more than \$6 million on one day — the day after the horrible earthquake in Haiti in January 2010. Online donations flooded in because many concerned people felt safe trusting the organization with the task of getting that relief to the victims of the quake. You could say, then, that the American Red Cross brand name is worth \$6 million a day in donations. Wow.

The American Red Cross has a legal team working on the protection of its distinctive logo: the red cross from which the organization takes its name. The logo is sometimes licensed to

companies for use in marketing, such as on Band-Aids, marketed by Johnson & Johnson.

The organization also engages in legal action to defend its control of its distinctive logo. Red Cross attorneys insisted that Lions Gate Entertainment, the producer of the movie *Saw III*, remove the red cross from the risqué uniforms worn by nurses in posters advertising a Halloween blood drive sponsored by Lions Gate. Even though the drive was a charitable effort to get donations to the Red Cross blood bank, The Red Cross determined that the association of the Red Cross logo with the nurses in the poster was inappropriate.

Increasing your chances for trademark approval

To prevent confusion and possible legal trouble (in the form of suits from companies that think you've infringed their trademarks), make sure that your brands and logos can't possibly be confused with existing ones. If there's even a chance of confusion, you could be forced to give up your mark. This is where your creativity comes in. Adjust or improve your logos and brand names until they truly stand apart from all others!

To check whether your name and logo are distinctive, search relevant databases, starting with the U.S. Patent and Trademark Office's Trademark Electronic Search System (TESS). Go to www.uspto.gov, and click Search Marks to find a basic TESS search option.

Establishing your rights by using your mark

If you've just designed a new logo and want to protect it before starting to use it, you need to file an Intent to Use form along with your application for a U.S. trademark, because trademark law (unlike patent law) requires use. You can't just sit on a brand name or logo; if you don't use it, you lose the rights

to it. Begin to use your design as soon as is reasonably possible, and make sure that you file a Statement of Use within six months of being granted your U.S. trademark based on an Intent to Use filing.

If six months is too soon, you can file an extension request and gain another six months for a \$150 fee. In fact, you can extend the deadline five times, but eventually, you must show proof (examples and samples) that you're actually using the trademark in commerce; otherwise, you lose your rights to it.

Unlike patents, trademarks can be applied for *after* initial use without forfeiting any rights — unless someone else happens to file for a similar trademark in the interim, in which case you'll wish that you'd been more prompt so as to prevent competitors from thinking that the trademark was available.



If you have a great logo in hand and want to begin using it, and if you're quite sure (based on searches of relevant trademark and business databases) that nobody else has a similar one in your class of business, go ahead and start using it. Print it on letterhead; stamp it on products; use it on packaging, labels, displays, Web sites, and advertisements. If you haven't been granted your U.S. trademark yet, show your intent to trademark your logo by including TM after the brand name or symbol. After your trademark is granted, you should switch to ® directly following the trademark, to show that it's registered.

Pursuing Patent Protection

So you have an invention, such as a new product or process, that you think is unique and special, and you want to protect it from copycats and imitators. Great! Figure out whether it qualifies for patent protection by asking yourself these questions:

- ✓ Is it useful?
- ✓ Is it unique?
- ✓ Is it nonobvious?

If your initial answer to all three questions is yes, there's a good chance that your innovation is patentable. Your opinion isn't the one that matters, however. It's up to the U.S. Patent and Trademark Office to decide whether you'll receive 20 years of exclusive rights to your invention — or not. Often, applications are turned down, although a rejection may be due to a poorly written application or a lack of proper background research rather than anything fundamentally wrong with the invention itself.



Can you file for patent protection yourself? Sure. You can also do your own retirement planning, fill your own dental cavities, and replace the roof of your two-story house — if you don't mind running the risk of messing up your patent application, ruining your teeth, and falling off your roof. Okay, that's a bit harsh,

because some amateurs do succeed at winning patent protection, but generally, it's wise to get good legal advice, and that means spending some money. Patents usually cost more to obtain than other forms of legal protection for your intellectual property, and take longer, too — as long as a year in many cases.

Searching for existing patents

All too often, entrepreneurs and inventors get well into the application process before discovering that someone has patented something similar already. Just because you haven't seen a similar invention for sale, don't assume there are no competing patents! Many patent applications are rejected because an existing patent covers some or all of the design or invention. No doubt the inventor who submitted the rejected application thought that she had done something completely original, but with millions of patents on file, it's easy to repeat something by accident. Professional patent lawyers examine all similar patents carefully and may suggest editing the application to differentiate your invention more clearly from past patents. You can improve your chances of success by doing your own preliminary search.



There are two U.S. patent databases: 1976 and before, and post-1976. It's important to search both. The earlier patents are most likely expired. Expired patents are still relevant, however, because your invention isn't unique unless no previous patents — expired or not — are substantially the same.

Take advantage of full-text search post-1976

Patents filed since 1976 are in easy-to-search digital form and are kept current to today's date, which is pretty impressive for a government resource! To do a quick search (the best way to scan for any patents that might overlap with yours), follow these steps:

- 1. Identify a few terms that describe your invention very specifically.**
- 2. Go to the Quick Search page at the U.S. Patent and Trademark Office Web site (patft.uspto.gov/netahtml/PTO/search-bool.html).**
- 3. Enter your search terms in the Term 1 and Term 2 text boxes.**

Use the most general terms that describe the utility or basic functionality of your invention, such as *squirrelproof* and *bird feeder*. Terms can be more than a single word long.

- 4. Set the Field 1 and Field 2 drop-down menus to All Fields.**
- 5. Click Search.**

A screen displays all patents since 1976 that use your two search terms in their title or text, arranged from newest to oldest.

No matter how unique you think your invention is, you'll be surprised by the number of patents that pop up as matches for your search terms.

Study search results that match your invention

When you get your search results (see the preceding section), open the most recent patent (or the most recent one that seems to be at all similar, if the search returned too wide a mix of patents). Then read the abstract. Abstracts are usually very clear and simple, so you can get the big idea behind the invention right away.

Check to see whether your invention is similar to the one in the most recent application. If it is, you're probably going to run into trouble. Most likely, you'll need to redesign the invention to make it more unique, or think up another invention and give up on that one. Don't give up too soon, though. Multiple patents can address the same utility or function, but in different ways. Numerous patents have been granted for squirrelproof bird feeders, for example, because each feeder has a unique design. Maybe your design is unique and better than earlier attempts, and your application will be granted!

Continue through the list of search results, checking each one for similarities. As you review a result, read the full text of the abstract, and click the Images link at the bottom of the page to examine any designs that may be similar to yours. Check to see that nobody has used your design or a similar one.

Check references in recent patents for the numbers of earlier patents

Look at the References Cited section that appears just after the abstract. Most patent filings reference earlier patents that may be related (and point out important differences). The homework that these earlier inventors did to identify relevant patent documents is helpful as you do your own research; it can point you to additional patents that your search didn't turn up but that you ought to be aware of before you write your application.

What if someone patented something similar to your invention before 1976, when digital filings started? Then you have to go into the old-fashioned paper files, which used to mean going to Washington, D.C., and asking to review actual files. Now the pages of patent filings between 1790 and 1976 have been scanned and are online as TIFF images that you can search from this link: patft.uspto.gov/netahtml/PTO/patimg.htm. Unfortunately, you can't search by term. You have to enter a patent number, which means that you need to know that the patent exists and what its number is.

Budgeting the cost of filing a patent

Expect to spend a minimum of \$20,000 to file for a U.S. patent application and possibly another \$10,000 for foreign rights or any minor changes that might be required. Conventional advice is to budget \$15,000 for your filing, but I think it's wise to double that amount.

Keep in mind that a budget of \$30,000 for your legal work is quite modest compared with what a large firm might spend. Big companies tend to submit

multiple applications in an effort to cover their inventions in multiple ways, such as a patent covering the basic design very broadly, along with several applications covering specific forms and applications of the design.



You don't pay just to file a patent; you also have to pay to maintain a patent. Other filings and fees may be required over the years, as well as costs associated with defending the patent from violators. It's hard to estimate such costs, because they vary significantly, but they can be anywhere from \$5,000 to \$100,000 per year, depending on the scale of the patent and the sales resulting from it.

Deciding whether a patent is worth the investment

Many entrepreneurs and inventors tell me that they've been told by experts not to bother with a patent application if they don't have plenty of additional money to spend on defending the patent. I think that's the wrong way to approach the decision of whether to file. If the innovation proves to be valuable — if you're making significant money by selling something based on your patent — plenty of funds should be available for legal work, and you'll want to defend your rights assertively. If you don't have significant sales, you won't need to defend the patent, so don't worry about future costs now; they tend to be self-funding. Focus on the initial investment and on whether it makes sense to spend money to file for a patent.

The following checklist can help you decide whether to invest in a patent application:

✔ Is the invention or design likely to be profitable?

If not, there's not much point in filing. If you see potential economic value to the invention or design, go on to the next question.

✔ Is the invention or design likely to be eligible for protection?

The answer depends on whether the item is novel, useful, and nonobvious. If you think that your item qualifies on all three counts, go on to the next question.

✔ Can you make money from a patent covering your invention or design?

Sometimes, people come up with concepts that seem to be clever and original but are so far from their general area of expertise that they may not be able to flesh out the idea fully or bring it successfully to market. This question gives you a reality check, making sure that you have a real business reason for proceeding. If you think that you can turn the idea into a practical design that can be patented and marketed (or licensed to someone who can market it), you probably should apply.

✔ Can you raise the cash needed?

If you answered "yes" to the first three questions, you're probably fairly sure that an investment in a patent application could provide a good

return. If you can divert nonessential funds to the application cost, go ahead and fund it yourself. If you'd have to skip several mortgage payments to apply, you need to find a partner or investor who has deeper pockets than you do. Don't bet the farm on a patent application!

Saving money by filing patent forms yourself

Sometimes, inventors file their own patent applications, and some of these low-cost applications do get granted, so it's possible to beat the cost of a lawyer-driven patent application process. But it's likely that you'll make some mistakes and get weaker coverage than you would with proper legal representation, so I view self-filing to be the very last resort.

To download instructions and application materials for filing your own U.S. patent application, go to www.uspto.gov/patents/process/file/efs/index.jsp.

To file online in the United States, you'll use EFS-Web, which makes it quite simple to submit PDF pages for review by the U.S. Patent and Trademark Office. If you're a confirmed do-it-yourselfer, check the instructions on the EFS home page at the preceding link.



Writing a really compelling and well-designed patent application is a legal art, and I recommend hiring a patent attorney who's familiar with both the patent office and its technology.

Considering foreign patent protection

U.S. patents don't protect you in other countries. The United States has signed the major international treaties concerning patents, but these treaties simply give you the right to file for patent protection in other countries too. It's up to you — or your lawyer — to decide which countries to file in and to do the proper searches and filings according to those countries' regulations and deadlines.

If you decide to seek international protection by filing in other countries or regions (such as the European Union), keep in mind that foreign filings can interfere with your efforts to obtain a patent in the United States. You may need to obtain permission from the U.S. Commissioner of Patents and Trademarks before filing in foreign countries so as to avoid compromising your U.S. application.

Filing a provisional patent

A possible way to stake your claim to an invention without spending thousands of dollars on an official filing by an intellectual-property attorney is to file a provisional patent yourself. In the United States, go to the U.S. Patent and

Trademark Office Web site at www.uspto.gov/patents/index.jsp, and follow the instructions for provisional filing. Then get to work on your application. You don't want to leave it provisional any longer than you absolutely have to.



If you think that your invention is really valuable, but you can't file a patent application for financial reasons, you need to keep it secret (see "Protecting Trade Secrets" later in this chapter). If someone else finds out about your invention or sees your plans, he can copy you, and you won't be able to do much about it because you don't have a patent.



Even worse, if other people spread the word about your invention before you file, and the information becomes common knowledge, your application will probably be denied simply because other people are imitating your invention. Hey, I warned you. File now if you can possibly afford to do — or at least file a provisional application to show your intent and establish a timeline.

Assigning or licensing your patent rights

When your patent application is granted, you gain rights that you can assign or loan under licensing agreements. Scientists working for drug companies and electronics firms, for example, routinely assign their rights to their employers because their employment contracts require them to do so. Also, companies often license the right to use a patented invention to another business in exchange for a fee or royalty of some kind.



Such arrangements are best designed and managed with expert legal help.

Protecting Trade Secrets

You may think your application for a patent will be denied, or you may not want your control of a recipe or design to expire — which all patents eventually do — so you may decide to simply keep it a secret. Of course, this approach works best when nobody can tell what your recipe or design is just by looking at it. You may be able to keep secret a special formula for a soft drink or a manufacturing process hidden inside a locked building, so these are candidates for trade secrets.

For example, your recipe for Aunt Matilda's Magical Muffins may not be patentable, because no matter how wonderful the muffins taste, people have been baking all sorts of muffins for a long time, and you probably can't establish that your recipe is truly unique and nonobvious. Still, if your muffins taste better than the competition's, you really don't want other people to start using your recipe, so you'd better keep it secret.



If you have a new recipe or process that you think is a good candidate for trade secrecy (because it's not something others could figure out just by studying your product and it gives you an advantage over the competition), start by securing the information carefully. Limit the number of people who know the secret to the absolute minimum, and make sure that each of them signs a contract committing them to keeping it secret. Also keep all records of the secret under lock and key somewhere very secure, such as a bank vault. You have to take every reasonable precaution to keep your recipe or formula secret if you want the courts to treat it as a trade secret.

Unlike a patent, a trade secret has no legal time limits; the only limit is how long you can *keep* it secret, so you could maintain secrecy indefinitely. If your time horizon is very brief, you may also want to rely on secrecy instead of a patent, because winning patent protection can take a year or more.

Taking reasonable precautions

Here are some strategies for keeping a trade secret:

- ✓ Don't tell anyone!
- ✓ Break a process into multiple steps, and have different people do different steps so that nobody but you knows the entire process.
- ✓ Keep the recipe under lock and key in a safe-deposit box or in your lawyer's office.
- ✓ Warn your employees and anyone else working with you that the recipe is secret and that you expect them to respect your right to keep it secret.
- ✓ Require everyone who might be exposed to the secret to sign a nondisclosure agreement so that they can't tell other people what they find out.
- ✓ Minimize employee knowledge of the trade secret.
- ✓ Don't try to maintain a trade secret that overlaps with a patent, because the contents of your patent application will become public if and when a patent is granted. (If you want to keep something secret until you find out whether it's patented, however, that's fine, because patent applications are sealed until the patent is granted.)
- ✓ Maintain tight physical security to limit employee access to your secret and to prevent intruders from seeing it at all.
- ✓ Be very cautious about licensing trade secrets, because licensees may be more likely to reveal your secret accidentally than you would be.

You may also want to keep customer lists and certain business methods secret. Many companies consider their customer lists to be trade secrets.

If you've built up a valuable database of customers and don't want anyone else to use it to try to take your customers away, you'll need to maintain much tighter security over it than most companies do. For starters, don't let any salespeople have access to the master list. Give them only specific call lists generated from your master list. Salespeople may be tempted to take their call lists out of the office and use them at the next job.

Enforcing a trade secret

If you take all reasonable precautions to keep a business process secret, but a competitor manages to discover it by being exceptionally sneaky, you may be able to take that company to court and get an order preventing its use of the secret. In the United States, at any rate, courts generally take a dim view of corporate espionage and award damages to the company whose secret has been stolen.



In a well-known case, a competitor took aerial photographs of a DuPont plant being built in Beaumont, Texas. The pictures were taken before the plant's roof was completed, so from the photos, the competitor was able to figure out DuPont's secret method for making methanol. DuPont sued to prevent the company from using or disclosing the information, and the court ruled in favor of DuPont, stating that the company had taken reasonable precautions to protect its formula and should not be required to take exceptional steps to prevent all possible types of espionage.

Keeping Your Records, Writings, Plans, and Designs Secure

A business's intellectual property includes lots of information that may not qualify for any form of legal protection but that is still of high value, such as financial records, customer lists, blueprints and engineering specifications, research studies, and strategic plans.

In the past, most of this intellectual property consisted of paper documents, so companies protected their most critical documents and plans by storing them in fireproof cabinets and safes. That's still a decent idea for protecting your most important papers, but now, most important documents are stored on computers. In general, you should seek technical assistance from experts on electronic data management and protection. Following are some specific protective measures for electronic data:

- ✔ Limit access to electronic documents to a short list of essential people.
- ✔ Create password protection of the actual documents where the software program in which they were created permits. In addition, electronic documents may be stored on computers or discs that are password protected.
- ✔ Isolate key documents from your daily-use computers and networks.



If you're concerned about a trade secret's protection, consider keeping it on old-fashioned paper only to eliminate the risk of someone hacking into your computer network and releasing secret documents to the public.

When you audit your intellectual property, take a look at data and document security along with the more formal legal IP categories (copyrights, trademarks, patents, and trade secrets). Businesses tend to back up historical documents such as accounting and tax records, but I find that they often overlook records of creative and innovative thinking. Be sure that you include the following in your backup plans:

- ✔ Records of the design process for new products or processes
- ✔ Logs of any brainstorming or idea-generation sessions
- ✔ Records of creative processes that proved to be productive in the past
- ✔ Suggestions, proposals, and ideas that haven't been evaluated or acted on yet
- ✔ Market research, both quantitative (such as survey results) and qualitative (such as customer suggestions, complaints, and opinions)
- ✔ Innovation plans and records, such as records of research and development or new-product teams
- ✔ Prototypes and test results from product trials or experiments
- ✔ Records of failures (so that they don't have to be repeated)

Innovation-oriented intellectual property needs special protection because it's grist for the innovation mill in the future. Identify, organize, and catalog records of innovation, and make sure that the artifacts (documents, prototypes, and so on) are stored safely and, if feasible, backed up in a remote location.



Consider the businesses in New Orleans whose intellectual property was endangered by Hurricane Katrina and the subsequent flood. Some of these businesses had backed up everything on servers in other cities and were able to resume operations right away; others weren't so lucky.

Chapter 18

Building a Business Around Your Innovation

In This Chapter

- ▶ Evaluating your innovation to see whether it will support an entrepreneurial venture
 - ▶ Preparing a winning business plan
 - ▶ Finding the funding you need to move ahead
 - ▶ Marketing your patents and inventions to licensees
-

I have an idea for a line of baby clothes inspired by the continual changes and wash-ups I've experienced as the father of five children. Any parent can tell you that baby stains on clothing don't come out in the wash, ruining all those lively pale pink, blue, and white infant outfits that one tends to be given as baby presents. Any parent can also tell you that those stains tend to be located in two strategic areas: on the front of an outfit and . . . well, in the diaper region. I'm thinking about establishing a brand of infant clothing called MustardSeed Nonstain Clothing for Fashion-Forward Babies. All the clothing will be mustard-colored in high-stain areas. The pretty blues and pinks can be used for trim, accent colors, and piping in low-risk areas of the garments.

If I'm serious about my idea, how do I go about building a successful business based around it? This chapter covers the basics of *entrepreneurship*, or the development of innovative new business ventures. This process of development breaks down into four key steps: doing your homework, writing your plan, funding your venture, and selling your invention.

Doing Your Development Homework

You may be ready to run with your great idea, but it's important to hold onto your enthusiasm for long enough to refine your design and figure out how to scale it up to the quantity or size needed for full implementation. You need to make sure that your innovation is ready to take to market, and the only way to determine that is by doing some homework.

Researching and refining your idea and market

If you have an idea that you think has the potential to be a good business, start by doing your internal and external homework:

- ✔ **Research your idea to refine it and turn it into a clear and specific thing — a prototype product or the plan for a specific business process or type of business.** This homework helps you make sure that you have more than just exciting ideas. You need to firm up those ideas and make them practical and specific.
- ✔ **Research your potential market — your customers and competition — to see whether your hunch is right that you'll have buyers for what you plan to offer.** No matter how well developed and clear your plans may be, it's up to prospective customers to decide whether your product is going to be popular or not. Check out existing options and pricing; explore attitudes and needs; and if possible, test the product or concept on actual customers to see what they say and do.

This research process is really just about the same as it would be for any commercial innovation. You start with what seems like a good idea and then firm it up through careful, persistent work. Do as much as you can to develop your concept into definite plans or designs first, and test your proposed offering on customers as well as you can. Build a solid case for why customers will think you have something new and special that they'll want or need.

Deciding whether to proceed with your innovation

After you've done your homework and refined your idea into a clear plan or prototype that tests well on prospective customers, you're ready to make a judgment: whether to go forward or not. This stage is an important moment of truth: You look critically at what you've developed and at what you've found out about possible market reaction to it, and then you decide whether you have a solid winner.

No matter how well you follow the standard advice on business planning and fund-raising for your new business (I cover both topics later in this chapter), you won't find entrepreneurship easy or rewarding unless you have an out-of-the-box great idea. Don't rush ahead with the first decent concept you think of. Keep thinking. Use the creativity methods in Chapters 6 through 11 to come up with a really astounding idea that powers your new business through the entrepreneurship process with ease. After you have your great idea, you can move on to business planning.

Protecting your intellectual property

Is anything about your new business concept proprietary and potentially protectable? If you have a product or process that you don't think others are on to yet, you should explore patenting it or see whether it would be best maintained as a trade secret (see Chapter 17). Similarly, a uniquely appealing design may qualify for a design patent.



If you anticipate relying on patent protection for an invention, focus on obtaining at least provisional protection before you show your invention to prospective customers or investors. In fact, don't show it to anyone except a patent attorney who's on retainer to you. When it comes to patents, be careful not to allow the details to slip out to the general public before you apply for coverage.

Next, you have trademarks to consider. Sometimes, the gist of a new business concept is a cleverly appealing brand name. If you have an idea for gathering large snail shells and packaging them in cute little house-shaped boxes under the brand name Pet Shells, you may want to try to obtain a trademark for that brand name to prevent others from using it should you actually manage to create a hot new consumer fad.

When you do your trademark and patent homework, you may find that someone else has filed a similar invention or mark already. There are two records in the U.S. trademark database for Pet Shell, one of which is dead — expired due to lack of use — and the other live. Apparently, others have tried to turn the idea into a hot consumer fad, probably without success. If you find that someone has gotten intellectual-property protection before you, you'll know that you need to go back to the drawing board and come up with another great idea. Don't write a business plan or recruit any investors for concepts that someone else already owns!

Writing a Winning Business Plan

Investors who read business plans are unimpressed by fancy spreadsheets and elaborately optimistic projections. They look for a solid concept, a great team to develop it, relatively low risk, and evidence that there are eager customers waiting to buy. Keep in mind the investor's perspective as you pull your team together and begin to write your business plan. (And consider getting your hands on a copy of William Sahlman's *How To Write a Great Business Plan* [Harvard Business Review]; visit hbr.org to purchase a copy.)

When I was just starting out in my career as an author and consultant, I sometimes had blocks of time where I didn't have any paying work lined up. I was living in Silicon Valley, home of thousands of high-tech startups, so I put out the word that I was available to entrepreneurs to ghostwrite their business plans. I was amazed by the flood of requests and worked on close to 100

plans in the several years it took for my own business to grow large enough to elbow out other work. In all that time I spent writing business plans, I found out a few things about the difference between the rare plans that raise capital easily and produce winning businesses and the many plans that don't:



- ✓ **Quality of the business concept:** The biggest difference between a winning business plan and an ordinary (meaning disappointing!) one is what happens before you start writing. It's easy to write a winning plan for a strong — really strong — concept that's well developed and researched before anyone tries to craft a business plan for it. Do your homework and make sure that you have a winning business concept before you bother with writing a formal plan. See the earlier section "Doing Your Development Homework" for how to make absolutely certain that your idea is ready to take to market.
- ✓ **Clarity of the concept:** The second major difference I saw between winning plans and unsuccessful ones was *the clarity of the concept*. Entrepreneurs who stumble over the question "Tell me about your business" aren't ready to write a good plan. Before you start outlining the plan, ask yourself this: What key fact or assertion do you want to express to readers? You need to decide on your plan's core message before you start writing because everything that you write needs to support that message.

Suppose that you're thinking about starting a business that makes custom bikes for serious riders, especially people who want to ride in extreme conditions and need extreme off-road bikes. What's the core reason for starting this business? Your reason may be this: "Extreme riders put so many demands on a bike, and themselves, that no off-the-shelf product can meet all their needs for performance and safety." That's a good clear statement of your intended purpose. Details such as whether you'll make the frames of strong, ultralight Reynolds 953 stainless-steel tubing are secondary to the main statement of your concept.
- ✓ **Length of the concept:** It's difficult but essential to simplify your story to the point that you can make it sound compelling in a single sentence. When you can write a winning one-sentence version of your concept, you're ready to go ahead and write a full-length, formal business plan.
- ✓ **Strength of the team:** You need people who know how to build the business and are well respected and well connected in the industry. If you don't have your dream team already, hold off on writing that business plan and start recruiting partners instead. Savvy investors read the résumés before they read the plan, so make sure that you have a team that looks great on paper.

The following sections walk you through the elements that make up your business plan, with the elements listed in the order in which they appear in your plan.

Design the cover, title page, and table of contents

It's rarely necessary to bind a business plan in a fancy or flashy manner. The custom is to present it in a simple, conservative (dark-colored, for example) paper binder like the kind you can buy at any stationery store. Give it a neatly printed title, centered one third of the way down the front cover. The title should read *Business Plan for [Your Innovation]* in 16-point Times New Roman or a similar font. Center the date on the line below the title, using 12-point type in the same font as the first line. In other words, the cover should look very simple and traditional.

The title page should mimic the cover but add — two thirds of the way down, in centered 12-point matching type — an address with full contact information for the business.

On the next sheet of paper, provide a table of contents. Set the header in 16-point Times New Roman or a similar font, centered at the top of the page. Leave a couple of blank lines below the header and then list each main section, followed by a dotted line that leads to a page number in a column on the right side of the page.

At the bottom of all pages following the table of contents, center a page number in the same type style as the main text — 12-point Times New Roman or a similar font.

If you recall writing research reports or term papers for high school or college, the style I'm describing may seem familiar. It's a traditional, straightforward, professional way to present information without frills or decorations. It shows that you mean business and are serious about your proposal, instead of trying to dress it up and oversell it with fancy graphic design. Let your innovation shine in the uniqueness of your proposal itself, not in the way you present it on paper. Lenders and investors are conservative — and why shouldn't they be? They're risking their money. A flashy plan puts them off.

Write the executive summary

The Executive Summary section is the first thing that most investors and lenders read. Keep it remarkably clear, brief, and to the point. The first sentence of your summary should be the one-sentence description of your concept that I asked you to develop before you started writing (refer to "Writing a Winning Business Plan" earlier in this chapter). Complete the first paragraph by providing several sentences of general information to explain how you'll be able to do what you say you can.

Imagine that your first sentence is this: “Water Bicycles, Inc., will revolutionize cardiovascular exercise by selling floating bikes that can be ridden for exercise and fun in pools or at beaches.” This description sounds intriguing, but to show that you’re serious and for real, add something such as this: “The company has applied for patents to protect its unique designs and has demonstrated their use and popularity through extensive consumer trials.” A plan opening with these assertions is bound to intrigue most readers.

Next, write a paragraph starting with the words “This plan’s purpose is to. . .” Complete the sentence by describing your fundraising or other needs, such as “obtain a bank credit line of \$100,000 to fund initial production and marketing costs.” Follow this sentence with a description of the benefits anticipated for the funder, such as this: “As this business plan explains, Water Bicycles, Inc., has a solid management team, a patented and appealing product, and a financial plan that should produce ample returns, allowing the business to pay down the proposed line of credit or refinance it through an equity offering within one year.”

For the rest of the executive summary, touch very briefly on the main sections of your plan. Devote no more than a few sentences to summarizing the main topics of the plan: operations and management, products, marketing, and financial projections. Mention the next year’s budget and projected sales, but don’t go into any detail. Ideally, the executive summary will be less than a page long.



Print this section (and all other sections) of your plan on one side of good-quality white paper.

Write your market analysis

The Market Analysis section of your plan needs to be thoughtful and detailed because it’s where you prove there is demand for what you intend to sell. Describe the benefits of your product or process and the people who will most want to use it. Explain what the competition is offering and why your new offering will be more appealing to specific types of customers. Analyze the range of pricing in the market and show why your proposed pricing will be viewed as reasonable. If you’ve done any testing or market research, describe your results here too.

Make sure that you include a clear, specific description of how you’ll market and sell the product, including what kind of advertising you’ll do and what kind of sales force, distributors, or retailers you’ll use to bring your product to market. Include marketing budgets, sales commissions, reseller markups, and other marketing costs here.

For help with sales-force design, advertising plans, pricing, and other marketing topics, see *Marketing For Dummies*, 3rd Edition, and *Marketing Kit For Dummies*, 3rd Edition (both from Wiley).

Prepare a company description

In the Company Description section, describe the form of organization your business is in or will take when you secure financing. (In the United States, a business can be organized as a sole proprietorship, partnership, or Subchapter S corporation.) Identify all owners and the terms of their ownership interests.

Explain your operations (what you'll produce and how) and your facilities (any offices, factories, or other places where you'll be performing work). Give any other details about the company and its operations and activities that might interest a potential investor or lender. Keep your account factual and specific, and avoid speculation and exaggeration.

Write a description of your innovation

In the Description of the Product section (or Description of the Process, depending on what sort of innovation it is), provide a clear, brief description of what you've invented; then go into sufficient detail about the specifics to convince the reader that your invention has merit and is likely to be successful.



As I say at the beginning of this chapter, you ought to have a valuable innovation of some kind. Don't start a business just to start a business. The United States has more than 100,000 gas stations, for example, and more than half of them have convenience stores, so starting a business that manages gas station/convenience stores isn't very innovative. You need to explain why yours will be better than competing stores and worth the risk of investment. In this section, explain your invention clearly and accurately, emphasizing technical information and avoiding anything that sounds like an excited sales pitch.

Provide one to three objective facts to justify your claim to innovativeness and value. You might say, "There are more than 100,000 gas stations in the United States, but ours will be the first to offer simultaneous fueling, cleaning, and computerized mechanical diagnostics, because we've invented a patent-pending service system that performs all these functions inexpensively and in the same length of time it takes to fuel a car at a traditional gas station."

Support your description of your innovation by providing information about the competition and showing why your concept is special. If you have (or are pursuing) intellectual-property protection, describe those activities here. Also, review the practicality and costs of scaling up to full commercial operation. If you haven't worked out how to scale up, admit it, and explain that you're seeking funding to work on your development of the invention.

Describe the organization and management of the business

In a section titled Organization and Management, start by introducing the management team, which should include people with the technical and business expertise to make the plan a success.

Describe the management team and employees, explaining what each of them do. Review the operations of the business in more detail here, explaining how each step will be managed and what the main concerns or risks might be. Give an overview of your staffing plans or practices, including a summary of the costs of salaries, benefit plans, and other details that will determine your overall payroll costs. Add information about your legal and accounting support; identify and give contact information for your corporate attorneys, auditors, and accountants.

Include a short section in which you discuss any major changes that you'll need to anticipate and plan for as the business grows. Will you need to move to a larger facility or hire more supervisors, for example? Describe your plans for handling such challenges.

Summarize marketing and sales

Use the Marketing and Sales section to describe the target market and the ways in which you'll inform and persuade prospective customers. Your purpose is to convince potential lenders and investors that you really can make your sales projections and produce significant and growing revenue. If you're not sure of that yourself, do some more research. Identify salespeople who will agree in writing to come to work for you when you have your funding in place, or sign contracts with distributors or sales representatives (firms that do your selling for you). Include these contracts in an appendix, and reference them in this section.

Provide an analysis of your target market — the people or businesses you think will purchase your product or service. Be specific about who you'll sell to, how many will buy per month and year, and how much they'll buy. These estimates will form the basis of your sales projections, so think them through carefully, and explain your thinking clearly enough that potential investors or lenders will be able to understand how you produced your sales forecasts.

Present your service or product line

Every product has competition. If your innovation is a big improvement over old products, that's great, but you still have to win customers, which means

changing their habits and getting them to send their money your way rather than elsewhere. It's helpful to start your About the Product section with a table comparing your product's features with those of its closest competitors. Then describe the details of your product and how you plan to produce it. The main point of your description of producing the product is to show that you understand the costs involved and can realistically produce your product for less than half of what you'll be able to sell it for.



If you have any trade secrets, don't give them away, but do describe generally what advantage they give you.

If you have or expect to get patent protection (check out Chapter 17 for more on protecting your intellectual property), describe what you're applying for in general terms, but don't give your invention away unless you've already won all the patent protection you're applying for.

Reference any photographs, diagrams, specifications, or drawings of your product that appear in the appendix so that readers know to look for them there. If you think it's helpful, include one clear black-and-white photograph of the product as an exhibit in this section.

Explain your funding needs

This section is usually called Funding Needs, and it describes what the venture requires in the way of debt or equity investment. Make this section clear and simple, providing specifics about what financing you'll need and when. Your description of your financing needs should be based on the cash-flow projection in your financials. A *cash-flow projection* lists beginning cash, plus cash receipts for each month (such as investments and payments), then subtracts spending for the month to see whether you have enough cash to meet your spending needs.

Carry the net (whether negative or positive) from the first month over to the beginning of the second month in your cash-flow projection, because it's the beginning cash for that month. The second month's net becomes the third month's beginning cash position, and so forth, across the months of your cash-flow table. I recommend using a spreadsheet program such as Excel or iWork to build your cash-flow projection; they make it easy to edit and revise as you work out the details of your plans.

When you have a year or more of monthly cash flows projected in a spreadsheet, you'll be able to see your financing needs. Most new businesses have little to no sales in the first year, but lots of expenses, so the losses accumulate from month to month. Keep projecting cash flows for future months and years until you reach a point where the numbers finally shift to the positive. That's when your plan should begin producing a positive cash flow, giving you the ability to repay a loan or provide profits to investors.

When you have a detailed, careful cash-flow projection covering the entire development period until the time when cash flows turn positive, scan the monthly bottom-line numbers to identify the biggest loss — often a year or two into the venture. The amount of this loss is approximately the amount of financing you need to raise in order to fund your venture. You'll need to infuse that much cash in one or several stages during development in order to keep your business checkbook from actually going into the red.

Revise your cash-flow projection by showing sufficient investments or loans to prevent the balance from being negative. Then produce a summary of funding needs based on the timing and amounts of funds your cash-flow analysis indicates you'll need.



Be specific about how you'll use the funds — to purchase capital equipment, to cover short-term operating expenses until you reach sufficient volume to break even, or whatever else you need the funding for.

Prepare your financials

The Financials section should include three to five years' worth of historical financial statements, if you've been in business that long. Show yearly income statements, balance sheets, and cash-flow statements. If your business is a startup, of course you won't have historical statements, so you need to include only projected financials.

Your projected sales should be based on the sales projections in your Sales and Marketing section, and the costs should relate to the description of your business in the Organization and Management section.



If you don't know how to prepare income statements, balance sheets, and cash-flow statements, get an accountant to help you. To be as accurate as possible, develop a detailed list of expenses and budgets, brainstorming as many details as possible, so that you're able to build up overall expense projections from very specific guesses about component costs.

Many business plans include an analysis of the financial statements, with ratios and trends identified, much as a stock analyst might do in examining a major public corporation.



If you're planning to approach a bank for a Small Business Administration (SBA) loan, check its requirements for financial statements and exhibits. See the checklist of required papers at www.sba.gov/tools/Forms/smallbusinessforms/fsforms/index.html, or contact the nearest SBA district office by phone for help. (For locations and contact information for all offices, see www.sba.gov/localresources/index.html).

Prepare an appendix of supporting documents

The appendix is an optional — but in my opinion *extremely* useful — part of a business plan. If you're using your plan primarily to raise funding (whether via loans, a line of credit, or equity investments), the appendix should include documents that support your funding request by showing that you're financially responsible and qualified to run a business and handle its finances. Exhibits for the appendix may include

- ✓ Credit histories for key members of the management team and for the business itself if it has been around long enough to have one
- ✓ Résumés and letters of reference for key members of the management team
- ✓ Documentation of relevant patents, trademarks, copyrights, licenses, building permits, operating permits, leases, or contracts
- ✓ Plans, diagrams, schematics, or photographs of facilities, processes, or products described within the plan
- ✓ Copies of supporting research documents, such as articles or studies
- ✓ Records such as photographs and testimonials showing the results of field tests or customer reactions

You can think of a good business plan as being a presentation of your business concept involving both “show” and “tell” elements. The main body of the plan tells your story in words and numbers, leaving the appendix to illustrate the story. Use the flexibility of the appendix to full advantage by including as many supporting and illustrative documents as you can. A business plan of 25 pages with a 30-page appendix is a potential winner because it's just long enough to provide detail without being unreadably long, and it has a convincing amount of supporting material in its appendix.

Funding Your Innovative Venture

The majority of business startups are financed informally by people who are directly involved in the business themselves or have relatives who are. The initial investments are usually modest, as are the businesses. New retail stores, home-based crafts producers or importers, and small firms specializing in equipment leasing are examples of the millions of small businesses that are started every year. How are they financed, and how well do they do?

You've probably heard that more than half of all new businesses fail in the first year. You may also have heard that successful new ventures have to apply to *venture-capital firms* — companies that raise large pools of private funding for entrepreneurial investments. Both beliefs are wrong.

The failure rate is better than people think, but not stellar. Only a quarter of new businesses fail in the first year. It takes four years for half of them to fail. After ten years, only a third remain standing, according to Scott Shane, a professor of entrepreneurship at Case Western Reserve University, who tracked a sample of startups over a ten-year period.

It's also untrue that venture capital funds most startups. Venture-capital firms provide larger investments than individual investors do, and they're often involved in the most newsworthy ventures, so they tend to seem more important than they really are. If you're starting a small, local business, you won't qualify for venture capital. However, if you're starting a business based on an innovation that has the potential for national or international success, it makes sense to ask venture capitalists to review your plan. You just might be a good match for one of them.

Pairing up with venture capitalists

Venture-capital firms generally seek to make investments of between \$250,000 and \$1.5 million, and they like to invest in businesses that aren't brand new, because a few years of demonstrated growth makes the investment far less risky for them. They look for entrepreneurs who have stellar résumés (high-level management or technical experience in the industry) and an innovation that promises to produce explosive growth in the next five to seven years. If your business doesn't fit this profile, don't bother trying to approach venture-capital firms.

You can locate venture-capital funds by asking a friendly stockbroker to find out what funds have been actively raising capital in recent months (indicating that they have new funding to invest). At the time of this writing, however, fund-raising by venture-capital firms is at an historic low, with only a few actively recruiting investors. As the economy regains strength, this number should rise back to a few dozen or more a year.

Plenty of venture-capital funds aren't actively raising money right now but may have money to invest. Locate them by attending regional events sponsored by an association of venture capitalists in your area. In the United States, contact the National Venture Capital Association (NVCA; www.nvca.org) for an up-to-date listing of regional organizations. Some of these groups hold occasional events in which entrepreneurs are invited to present brief summaries of their plans and get to meet potential investors.



Generally, the best way to locate lists of venture-capital firms is through published sources. Most fund-raisers have to resort to published directories in books such as *Directory of Venture Capital*, by Kate Lister and Tom Harnish (Wiley), or *The Directory of Venture Capital & Private Equity Firms* (Grey House Publishing) for master lists with contact information.



Lots of firms offer to help entrepreneurs find venture-capital financing. These intermediaries or middlemen usually live off the fees they charge entrepreneurs, and in my experience, they rarely provide much value for the money. A real venture-capital fund won't charge you to apply. It may treat you impolitely, keeping you at arm's length and not taking your anxious calls to see whether anyone has read your plan, because the firm probably reviews thousands of plans a year. As long as the firm doesn't charge you a large reading fee or other consulting fees, however, and simply agrees to add your plan to its pile for review, it probably is legitimate.

Avoid the many other firms that advertise or blog actively on the Web and are looking to make a quick buck from entrepreneurs instead of actually funding them. A good rule of thumb is to stay away if a firm wants you to pay upfront. Legitimate investors and their agents don't impose upfront fees for services.

Locating angel investors

Angel investors are wealthy people who make direct investments in startups and growing businesses. You can locate them through brokers or financial managers who provide high-end, customized wealth management services or through personal networking. Ask around; make everyone you know aware of your startup and any investment opportunities that it presents. Lawyers may also be a good source of referrals.

Some Web-based services say that they connect entrepreneurs with angel investors. I'm not sure how well this approach works, but as long as you're not spending money on the Web search, I suppose that it's worth trying. Check out businesses such as FundingPost (www.fundingpost.com) to get a feel for this option.

Compared with venture-capital firms, angel investors often look for smaller, earlier-stage investments. An investment of between \$25,000 and \$150,000 is about right for most angels. In exchange, they will want you to be incorporated or to establish a formal partnership with them, and they'll need legal papers giving them clear control of a portion of your firm. You'll have to negotiate with them to determine what valuation makes sense. If you're not making any money, no matter how exciting your innovation is, you're probably stuck with a low business valuation and may have to give up 10 percent to 50 percent of your equity in exchange for your first major infusion of funding (about the same percentage a venture-capital firm would take).

An experienced angel investor has probably worked with dozens of entrepreneurs and will bring a professional eye to your business plan, which is helpful. Look for an angel who can offer not only funding but also relevant management or board-level experience and who will be an asset to your board of directors.



Get a good lawyer to review your contract with an angel investor. Such an investor will have a good lawyer (if not, don't do business with him!), and you should, too.

Obtaining loans

The thing about debt is that it has to be serviced monthly and eventually repaid. If you currently have a positive cash flow for your venture and can afford to make the payments on a bank note or credit line, perhaps it's okay to apply for debt. Many entrepreneurial ventures, however, aren't far enough along to service debt reliably. Ideally, the lenders realize this situation and won't allow you to borrow enough money to get into trouble, but if they aren't wise enough to say no, you should be cautious yourself.

If you do have reliable and growing profits, you can apply to your bank or other banks in your community. Speak to a lending officer to see what products the bank has that might match your needs. If you're not quite established enough to get a bank loan, the SBA may be able to help you with a loan guarantee. Your banker should know about this option and how to apply.

Selling Your Inventions

Professional inventors generate good ideas at a faster rate than other people do. They're also good at refining ideas into viable inventions that they document clearly and well and at filing well-prepared patent applications that have a high success rate.

Sometimes, inventors build businesses based on their patents, but most inventors license their patents to established businesses. A license arrangement gives the licensee the right to use the licensor's patent in exchange for an upfront fee and a small share of profits. Licenses may be exclusive (no other licensees are allowed) or nonexclusive. Exclusivity makes sense when the licensee will have to invest in development and production before sales can commence.

If a product's patent is broadly applicable, the inventor may offer narrow exclusivity to a licensee for a specific application but reserve the right to sign up other licensees for other applications. The goal is to make sure that a well-qualified company is selling your invention in a market that it understands.