SIXTH EDITION

ENTREPRENEURIAL FINANCE

Leach/Melicher

Entrepreneurial Finance

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To my wife Martha, our great joys Laura and John, and the life we share

J. CHRIS LEACH

In memory of my parents, William and Lorraine, and to my wife, Sharon, and our children, Michelle, Sean, and Thor

RONALD W. MELICHER

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Preface

The life of an entrepreneur is exciting and dynamic. The challenge of envisioning a new product or service, infecting others with entrepreneurial zeal, and bringing a product to market can be one of the great learning experiences in life. All ventures require financing—taking investors' money today and expecting to return a significantly larger amount in the future. Typically, the return comes from the venture's public offering, sale, or merger. In the interim, the venture must manage its financial resources, communicate effectively with investors and partners, and create the harvest value expected by investors.

Textbook Motivation

The purpose of the textbook is to introduce financial thinking, tools, and techniques adapted to the realm of entrepreneurship. We believe that, while much of traditional financial analysis may not be ideally suited to the venture context, there is great value in applying venture adaptations.

This entrepreneurial finance text introduces the theories, knowledge, and financial tools an entrepreneur needs to start, build, and harvest a successful venture. Sound financial management practices are essential to a venture's operation. The successful entrepreneur must know how and where to obtain the financing necessary to launch and develop the venture. Eventually, that same successful entrepreneur must know how and when to interact with financial institutions and regulatory agencies to take the venture to its potential and provide a return and liquidity for the venture's investors.

The Life Cycle Approach

We incorporate a life cycle approach to the material in this text. Successful ventures typically begin with an initial **development stage** where the entrepreneurial team generates ideas and assesses the associated business opportunities. Most entrepreneurs realize that a business plan can greatly improve the chance that an idea will become a commercially viable product or service. **Startup stage** ventures focus on the formulation of a business model and plan. As marketing and selling products and services begins, **survival stage** ventures often refocus or restructure. **Rapid-growth stage** ventures increase their momentum, and begin to demonstrate value creation. **Early-maturity stage** ventures typically look for ways to harvest the value created and provide a return to their investors.

Each stage in the life cycle requires a specific understanding of the financial management tools and techniques, potential investors and their mindset, and the financial institutions supporting that venture stage. During the early stages of a venture's life, cash management tools and survival planning are the dominant forms of financial analysis. Cash burn rates are very high and additional sources of financing are usually limited, making it critical for the successful venture to project and accommodate necessary operating costs. The need to measure and adjust investment in working capital and property, plant, and equipment is evident. The process of anticipating and accommodating costs and asset investments begins with the analysis of historical financial experience and then projects future financial positions using projected financial statements or their proxies. Successful ventures emerging from their survival stages can concentrate more on value creation and calibration. Consequently, our financial management emphases for this stage are valuation tools and techniques.

Equally important as sound financial management practices is the need for the entrepreneur to understand the types and sources of financial capital and the related investment processes. During the development stage, seed financing usually comes from the entrepreneur's personal assets and possibly from family and friends. Business angels and venture capitalists are important financing sources during the startup stage. First-round financing from business operations, venture capitalists, suppliers, customers, and commercial banks may be initiated during the survival stage. The rapid growth stage involves second-round, mezzanine, and liquidity stage financing from business operations, suppliers, customers, commercial banks, and investment bankers. Once a venture enters its early-maturity stage, seasoned financing replaces venture financing. Seasoned financing takes the form of cash flow from business operations, bank loans, and stocks and bonds issued with the assistance of investment bankers or others. Our approach is to introduce the types and sources of financial capital that become available as we progress through a successful venture's life cycle.

The successful entrepreneur must understand the legal environment regulating financial relationships between the venture, investors, and financial institutions including venture capital funds and investment banks. We cover the basic securities laws and regulatory agencies, particularly the Securities and Exchange Commission (SEC), relevant to the entrepreneur when considering how to obtain financial capital at each stage.

To summarize, we take a comprehensive three-pronged stage-sensitive approach to entrepreneurial finance. Our coverage of entrepreneurship-adapted financial analysis and pertinent institutional details provides a relevant financial analysis base for the entrepreneur in each of the various stages as he or she develops the idea, brings it to market, grows the venture's value, and ultimately provides an exit for venture investors. We identify and explain the types and sources of financing available during the various stages and introduce the legal and regulatory environment the entrepreneur must consider when seeking financing throughout the venture's life cycle.

Distinctive Features

This text considers a successful firm as it progresses through various maturity stages. Specific examples of stage-relevant skills and techniques we introduce include:

- **Brainstorming and Screening:** Chapter 2 (Developing the Business Idea) introduces qualitative and quantitative venture screening devices. Chapter 3's (Organizing and Financing a New Venture) treatment of intellectual property issues demonstrates important issues and concepts for the earliest stage ventures.
- **Projecting Financial Statements:** Chapter 6 (Managing Cash Flow) focuses on the importance of maintaining adequate cash flow in the short run. Cash is "king." Chapter 9 (Projecting Financial Statements) focuses

on long-term projections incorporating future financing needs and establishing a basis for creating value over time.

- **Raising External Funds:** Chapter 8 (Securities Law Considerations When Obtaining Venture Financing) treatment of securities law introduces readers to the restrictions and warnings for the growing venture seeking external financing.
- **Venture Diagnostics and Valuation:** Chapter 10 (Valuing Early-Stage Ventures) presents our versions of traditional valuation techniques important to internal and external perceptions of a venture's financial health. While the material is traditional, our treatment provides a unifying approach to projecting financial statements, extracting pseudo-dividends, and assessing a venture's value.
- **Venture Capital Valuation Methods:** Chapter 11 (Venture Capital Valuation Methods) introduces representative multi-stage venture capital valuation methods and interprets them relative to more traditional procedures. It provides a unified example of traditional pre-money and post-money valuations and the shortcuts employed by many venture capitalists.
- **Professional VCs:** Chapter 12 (Professional Venture Capital) explores the historical development of venture capital and describes the professional venture investing cycle from determining the next fund objectives and policies to distributing cash and securities proceeds to investors.
- **Harvest:** Chapter 15 (Harvesting the Business Venture Investment) considers a wide range of venture harvest strategies including private sales (to outsiders, insiders, and family), transfers of assets, buyouts, and initial public offerings.
- **Turnaround Opportunities:** Chapter 16 (Financially Troubled Ventures: Turnaround Opportunities?) introduces important aspects of financial distress and alternative restructuring approaches (operations, asset, and financial) to rescue a struggling venture.

Intended Audience and Use

The material contained in this text has been used successfully at the upper division (junior/senior) undergraduate, MBA, and executive MBA levels. For MBAs, the course can easily be conducted in two ways. In the first, what we term the life cycle approach, we recommend the addition of illustrative cases, each at different life cycle stages. Recently, entrepreneurial finance cases have been available individually from the usual providers and in collected form in entrepreneurial case books. The second, or what we term the venture capital approach, emphasizes the money management aspects of financing entrepreneurial ventures. For this approach, we recommend supplementing the text treatments with venture capital cases (available individually or in collected case books) and journal articles covering private equity (venture capital) and initial public offerings (investment banking). For an abbreviated mini-semester course or compressed executive MBA, we recommend concentrating on the text and using our capstone cases as focal points for integrating the venture financing perspective.

We have also used this text for semester-long upper division (junior/senior-level) undergraduate courses for finance and non-finance business majors. Most academic business programs require students to take basic background courses in both accounting and finance prior to upper division courses such as entrepreneurial finance. Chapters 10, 11, and 14 present a rigorous and conceptually advanced approach to financial valuation. Our experience is that these chapters provide the greatest intellectual challenge and require relatively sophisticated spreadsheet skills. The sixth edition of this textbook has been written to support two different approaches to the undergraduate entrepreneurial finance course. The more rigorous approach challenges undergraduate students by covering all 16 chapters including all valuation materials and has a decision-making focus. An alternative approach is to teach a more descriptive or conceptual course. For those preferring this latter approach, we recommend that Chapters 10 and 11 from Part 4 and Chapter 14 from Part 5 be omitted or covered in a descriptive (no modeling or calculations) manner. For application, while the included capstone cases synthesize a great deal of the text's material, some instructors find it useful to have students prepare short cases in lieu of, or prior to, these capstones.

Regarding the accounting and basic finance background material in Chapters 4 and 5, we provide it for student and instructor convenience when the material has not been covered in prerequisite courses or in instances when a review of the materials is warranted. The remainder of the text can be used without explicit coverage of this review material. Additionally, for some adopters, it may be advantageous to alter the sequencing and coverage of the securities law and investment banking material, depending on student backgrounds and other course offerings.

Pedagogical Enhancements in the Sixth Edition

Overall changes to content and organization include:

- We refreshed the "From the Headlines" and replaced four of them with new stories.
- We added one or more discussion questions at the end of each chapter.
- We continue to provide pedagogical guidance for each exercise/problem at the end of each chapter by providing a brief italicized description of the content or focus of the exercise or problem.
- We updated personal and corporate income tax information and discussed recent patent legislation.
- We updated our treatment of the JOBS Act and crowdfunding to reflect clarifications in released rules.
- We added new material on business incubators and seed accelerators.
- We added a discussion on business crowdsourcing and crowdfunding, including rewards-based and equity crowdfunding.
- We refreshed the terminology covered in the venture investing world, including "unicorns," and clarified the role of "convertible notes" as opposed to other types of "convertible debt."

Supplements

INSTRUCTORS MANUAL WITH TEST BANK

Written by the text authors, the Instructor's Manual includes short answers to end-of-chapter questions and answers to end-of-chapter problems. The Test Bank includes true/false and multiple choice questions, as well as short answer test problems. Both the Instructor's Manual and Test Bank are available on the text Web site for instructors only.

POWERPOINT LECTURE SLIDES

Created by the text authors, the PowerPoint slides present a point-by-point lecture outline, including graphics and equations, for instructors to use in the classroom. They are available on the text Web site for instructors only.

EXCEL SOLUTIONS

Excel Solutions to end-of-chapter problems requiring Excel are provided for instructors on the text Web site.

TEXT WEB SITE

The text Web site at www.cengagebrain.com provides access to these supplements.

ACKNOWLEDGMENTS

During the several years we spent developing and delivering this material, we benefited from interactions with colleagues, students, entrepreneurs, and venture capitalists. We thank the numerous sections of students who became the sounding board for our presentation of this material. We also thank the members of the Venture Capital Association of Colorado who opened their professional lives and venture capital conferences to our students. Additionally, we have benefited from detailed valuable comments and input by Craig Wright and Michael Meresman. Clinton Talmo and Robert Donchez contributed to the preparation of the Instructor's Manual for earlier editions.

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Finally, to our families for their patience through six editions, we offer our sincere thanks.

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About the Authors

J. Chris Leach is Professor of Finance and the Robert H. and Beverly A. Deming Professor in Entrepreneurship at the Leeds School of Business, University of Colorado at Boulder. He received a finance Ph.D. from Cornell University, began his teaching career at the Wharton School and has been a visiting professor at Carnegie Mellon, the Indian School of Business, and the Stockholm Institute for Financial Research (at the Stockholm School of Economics). His teaching experience includes courses for undergraduates, MBAs, Ph.D. students, and executives. He has been recognized as Graduate Professor of the Year and has received multiple awards for MBA Teaching Excellence. His research on a variety of topics has been published in *The Review of Financial Studies, Journal of Financial and Quantitative Analysis, Journal of Business, Journal of Accounting, Auditing and Finance, Review of Economic Dynamics*, and *Journal of Money, Credit and Banking*, among other journals.

Chris's business background includes various startups dating back to his early teens in the 1970s. During his transition to the University of Colorado, he was the chairman of a New Mexico startup and later, as an investor and advisor, participated in a late 1990s Silicon Valley startup that subsequently merged into a public company. His consulting activities include business and strategic planning advising, valuation, and deal structure for early stage and small businesses. He is a faculty advisor for the Deming Center Venture Fund and a member of the Deming Center Board of Directors. MBA teams Chris has advised have qualified for nine international championships of the Venture Capital Investment Competition.

Ronald W. Melicher is Professor Emeritus of Finance in the Leeds School of Business at the University of Colorado at Boulder. He earned his undergraduate, MBA, and doctoral degrees from Washington University in St. Louis, Missouri. While at the University of Colorado, he received several distinguished teaching awards and was designated as a university-wide President's Teaching Scholar. He also has held the William H. Baugh Distinguished Scholar faculty position, served three multi-year terms as Chair of the Finance Division, served as the Faculty Director of the Boulder Campus MBA Program, and twice was the Academic Chair of the three-campus Executive MBA Program. Ron is a former president of the Financial Management Association.

Ron has taught entrepreneurial finance at both the MBA and undergraduate levels, corporate finance and financial strategy in the MBA and Executive MBA programs, and investment banking to undergraduate students. While on sabbatical leave from the University of Colorado, Ron taught at the INSEAD Graduate School of Business in Fontainebleau, France and at the University of Zurich in Zurich, Switzerland. He has delivered numerous university-offered executive education non-credit courses and has taught in-house finance education materials for IBM and other firms. He has given expert witness testimony on cost of capital in regulatory proceedings and provided consulting expertise in the areas of financial management and firm valuation.

Ron's research interests focus on mergers and acquisitions, corporate restructurings, and the financing and valuation of early-stage firms. His previous research has been published in major finance journals including the *Journal of Finance, Journal of Financial and Quantitative Analysis, and Financial Management*. He is the co-author of *Introduction to Finance: Markets, Investments, and Financial Management*, Fifteenth Edition (John Wiley & Sons, 2014).

The Entrepreneurial Environment

1 PART

CHAPTER 1
Introduction to Finance for Entrepreneurs

CHAPTER 2
Developing the Business Idea

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CHAPTER 1

Introduction to Finance for Entrepreneurs

FIRST THOUGHTS

Only those individuals with entrepreneurial experience can say, "Been there, done that!" With aspiring entrepreneurs in mind, we start at the beginning and consider how entrepreneurial finance relates to the other aspects and challenges of launching a new venture. Our goal is to equip you with the terms, tools, and techniques that can help turn a business idea into a successful venture.

LOOKING AHEAD

Chapter 2 focuses on the transformation of an idea into a business opportunity and the more formal representation of that opportunity as a business plan. Most successful ideas are grounded in sound business models. We present qualitative and quantitative screening exercises that can help determine an idea's commercial viability. We provide a brief discussion of a business plan's key elements.

CHAPTER LEARNING OBJECTIVES

This chapter presents an overview of entrepreneurial finance. We hope to convey the potential benefit of embracing standard entrepreneurial finance methods and techniques. We consider an entrepreneur's operating and financial decisions at each stage, as the venture progresses from idea to harvest. After completing this chapter, you will be able to:

1. Characterize the entrepreneurial process.
2. Describe entrepreneurship and some characteristics of entrepreneurs.
3. Indicate three megatrends providing waves of entrepreneurial opportunities.
4. List and describe the seven principles of entrepreneurial finance.
5. Discuss entrepreneurial finance and the role of the financial manager.
6. Describe the various stages of a successful venture's life cycle.
7. Identify, by life cycle stage, the relevant types of financing and investors.
8. Understand the life cycle approach used in this book.

FROM THE HEADLINES

"Ice Is Really Hot Now"[1]

Decreasing the energy footprint of air conditioning systems has long been a target for clean energy innovators. The well-known challenge is that air conditioning–related energy needs peak during daytime hours when cooling needs are highest. Power generators respond by engaging every feasible generation technology at their disposal to deliver power, including methods that are far less efficient and cost effective than those usually employed in the absence of peaking demand. When engaging even the least efficient generators remains insufficient, "brown outs" or even "black outs" can arise. Batteries are a well-known way to store energy. Ice Energy's approach to the peaking challenge involves what one might call ice batteries for air conditioners. During the cheap and efficient periods (of the night), Ice Energy's Ice Bear system freezes water in a unit adjacent to an air conditioner. Then, during peak times, the Ice Bear cools the air conditioner's coolant by passing it through the previous night's ice, thereby decreasing dramatically the work required by the compressor to cool that coolant, which in turn cools the air piped into buildings. Simple enough in concept, the ice battery has now been combined with daytime solar,[2] and remains among the more successful early-stage clean energy startups offering scalable energy storage solutions for utility companies.

Ice Energy made Business.com's "The It-List: 10 Start-Ups to Watch in 2016" in part due to its recent deal to provide 25.6 megawatts of service through Southern California Edison,[3] which is projected to take Ice Energy out of research and development (R&D) and into profitability.[4] Hailing from Windsor, Colorado,[5] and founded in 2003, Ice Energy raised $10 million seed funding in 2006, followed by $25 million Series A funding in 2007, $33 million Series B funding in 2008, and $24 million Series C funding in 2010[6] with investors including Good Energies, Energy Capital Partners, Sail Ventures, and Second Avenue Partners.[7] Ice Energy is now based in Santa Barbara with an R&D center in Riverside.[8] It remains a private company with an investor group led by PAC Partners.[9]

1 Quoted from http://www.business.com/entrepreneurship/trendsetters-10-start-ups-to-watch-in-2016/, visited on 1/17/2016.
2 http://ice-energy.com/ice-energy-launches-solar-ice-the-greenest-most-cost-effective-solar-plus-storage-solution-for-utilities/, visited on 1/17/2016.
3 Ibid.
4 http://www.slate.com/articles/business/the_juice/2015/01/battery_and_storage_infrastructure_is_the_next_growth_area_for_energy_here.html, visited on 1/17/2016.
5 http://www.denverpost.com/ci_17963675, visited on 1/17/2016.
6 https://www.crunchbase.com/organization/ice-energy-inc#/entity, visited on 1/17/2016.
7 http://techcrunch.com/2010/10/18/ice-energy-seriesc-24million/, visited on 1/17/2016.
8 http://www.socaltech.com/ice_energy_opens_r_d_center_in_riverside/s-0061355.html, visited on 1/17/2016.
9 http://ice-energy.com/about/ownership/, visited on 1/17/2016.

Small Business Administration (SBA)
established by the federal government to provide financial assistance to small businesses

It is estimated that more than one million new businesses are started in the United States each year. The Office of Advocacy of the United States **Small Business Administration (SBA)** documents that "employer firm births" have exceeded 700,000 annually in recent years.[1] Reasonable estimates place nonemployer (e.g., single person or small family) businesses started each year at a similar number. In addition to these formally organized startups, countless commercial ideas are entertained and abandoned without the benefit of a formal organization. The incredible magnitude of potential entrepreneurial opportunities is a clear reflection of the commercial energy fostered by a market economy. We believe that the time spent on this book's treatment of financial tools and techniques may be one of the more important investments you make.

1 The Office of Advocacy of the Small Business Administration (SBA) was created in 1976 by Congress to be an independent voice for small business within the federal government. Small business statistics are available at http://www.sba.gov/sites/default/files/Startup%20Rates.pdf.

SECTION **1.1**

The Entrepreneurial Process

The **entrepreneurial process** involves: developing opportunities, gathering resources, and managing and building operations, all with the goal of creating value. Figure 1.1 provides a graphical depiction of this process. Many entrepreneurship students have formulated ideas for possible new products and services. However, prior to committing significant time and resources to launching a new venture, it can really pay to take the time and effort to examine the feasibility of an idea, screen it as a possible venture opportunity, analyze the related competitive environment, develop a sound business model, and prepare a convincing business plan.

entrepreneurial process
developing opportunities, gathering resources, and managing and building operations with the goal of creating value

The second aspect of a successful entrepreneurial process involves gathering the physical assets, intellectual property, human resources, and financial capital necessary to move from opportunity to entrepreneurial venture. The venture should organize formally and legally, the process of which also provides an opportunity for founders to build consensus for the new venture's boundaries of authority and basic ethical framework. Every startup needs "seed" financing and must have a strategy for acquiring it.

The third piece of the entrepreneurial process is managing and building the venture's operations. An effective business model must generate revenues to cover operating costs in the foreseeable future. Eventually, a growing venture will also need to provide enough cash flow to cover planned expansion and reinvestment. Additional financing rounds, possibly including those available through public securities offerings, may be necessary for growth in later years.

Figure 1.1 The Entrepreneurial Process

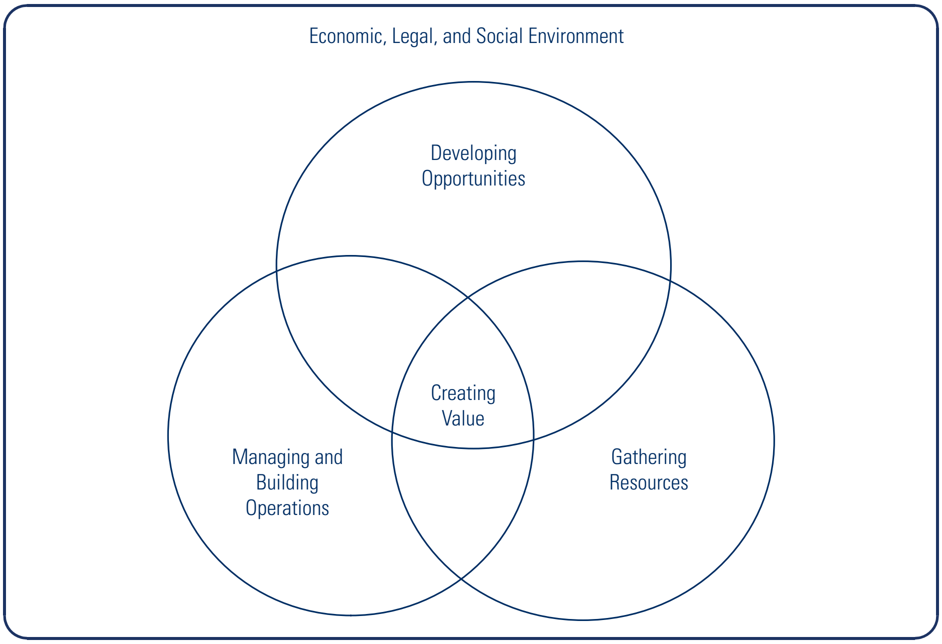

Figure 1.1 depicts an intersection of all three components—creating value. Each of the components contributes to the overall value. As a reminder of the wider context, we place the components and their intersection in the context of the venture's economic, legal, and social environment.

CONCEPT CHECK ► What are the components of the entrepreneurial process?

SECTION 1.2

Entrepreneurship Fundamentals

Successful entrepreneurs recognize and develop viable business opportunities, have confidence in the market potential for their new products and services, and are committed to "running the race." They keep success in sight even when others may have difficulty focusing.

WHO IS AN ENTREPRENEUR?

After working for a large corporation for nearly five years, you are considering launching a Web-based business. Product development and testing require financing that exceeds your limited personal resources. How much external financing do you need to make a credible attempt with the new venture? How much of the venture's ownership will you have to surrender to attract this initial financing?

A friend of yours, who graduated from college three years ago, started a new business on the conviction that pumpkin stencils and special carving knives could foster an unprecedented commercial exploration of the market for Halloween crafts. Her firm has experienced phenomenal growth and is seeking financing for this season's inventory stockpiling. Do her options differ from yours? Do the possible investors for your startup and her later-stage venture move in the same circles?

Your neighbor is the chief executive officer (CEO) of a large firm founded twenty years ago. He has accumulated enormous paper wealth and, before retirement, wishes to diversify his investments. How do your neighbor's investment goals and your financial needs relate to one another? Is your neighbor a reasonable prospect for startup funding, or is he more likely to spend the money he has allocated for earlier-stage investing on his own idea for a new product? Does he see himself as an entrepreneur or as one who wants to enable and profit from other entrepreneurs?

Who will succeed? Who will fail? Who is an entrepreneur? Your pumpkin-carving friend? Your CEO neighbor? You? All of you or none of you? We offer no infallible formula or process for entrepreneurial success. None exists. We cannot tell you if you should drop a Fortune 500 career track and take up drinking from the entrepreneurial fire hose. We have no blueprint for the ideal entrepreneur and no screening device to test for the entrepreneurial gene. Even if we had such a test, rest assured that for many who test positive, the news might not be welcome, particularly to friends and family. The ups and downs of the entrepreneurial lifestyle are difficult for those supporting the entrepreneur financially and emotionally. Nonetheless, we believe that the tools and techniques we introduce can help entrepreneurs and others anticipate venture challenges, navigate through shortfalls, and achieve important milestones. Fortunately for the entrepreneur, employees, backers, and their families, these tools and techniques can help smooth out an inevitably bumpy ride.

BASIC DEFINITIONS

While the academic definition of "entrepreneurship" has evolved, it is useful to formalize our context for the term. Jeffry Timmons and Stephen Spinelli suggest that "entrepreneurship is a way of thinking, reasoning, and acting that is opportunity obsessed, holistic in approach, and leadership balanced for the purpose of value creation and capture."[2] We adopt a somewhat shorter definition: **Entrepreneurship** is the process of changing ideas into commercial opportunities and creating value. An **entrepreneur** is an individual who thinks, reasons, and acts to convert ideas into commercial opportunities and to create value. Whether entrepreneurial efforts succeed or fail, an entrepreneur's mission is to find economic opportunities, convert them into valuable products and services, and have their worth recognized in the marketplace.

entrepreneurship
process of changing ideas into commercial opportunities and creating value

entrepreneur
individual who thinks, reasons, and acts to convert ideas into commercial opportunities and to create value

CONCEPT CHECK
- What is the meaning of entrepreneurship?
- Who is an entrepreneur?

ENTREPRENEURIAL TRAITS OR CHARACTERISTICS

While we want to avoid most generalizations about entrepreneurial traits or characteristics, there are three we consider important. First, successful entrepreneurs recognize and seize commercial opportunities, frequently before others even have an inkling of their potential. Mark Twain once said, "I was seldom able to see an opportunity, until it ceased to be one." Second, successful entrepreneurs tend to be doggedly optimistic. The glass is never "half empty" and usually not even "half full." It is "full," and they are ready to call for more glasses. Third, successful entrepreneurs are not consumed entirely with the present. Their optimism is conditional. They know that certain events need to take place for this optimism to be justified. They do not treat venture planning as the enemy. Seeing a (conditionally) bright future, successful entrepreneurs plan a way to get there and begin to construct paths to obtain the required physical, financial, and human resources.

While there are caricatures, there is no prototypical entrepreneur. Many authors have tried to identify specific characteristics of successful entrepreneurs, but accurate generalizations have eluded them. There are numerous myths about entrepreneurs.[3] One hears that "entrepreneurs are born, not made." Yet many successful entrepreneurs have been, or will be, failing entrepreneurs if observed at different times in their lives. While identifying the fear of failure as a personal motivation propelling them forward, successful entrepreneurs are not paralyzed by this fear. If you see venture bumps as opportunities rather than obstacles, perhaps the entrepreneurial lifestyle is right for you.

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2 Jeffry A. Timmons and Stephen Spinelli, *New Venture Creation*, 8th ed. (New York: McGraw-Hill/Irwin, 2009), p. 101. See also Stephen Spinelli and Rob Adams, *New Venture Creation*, 10th ed. (New York: McGraw-Hill/Irwin, 2016).

3 Timmons and Spinelli address seventeen myths and realities about entrepreneurs and summarize prior efforts to identify characteristics of successful entrepreneurs. Ibid., pp. 59–60.

CONCEPT CHECK ► What are some general traits or characteristics of entrepreneurs?

OPPORTUNITIES EXIST BUT NOT WITHOUT RISKS

If you feel the entrepreneurship bug biting, you are not alone. Remember, the annual number of new U.S. business formations runs in the millions. Small and growing enterprises are critical to the U.S. economy; small firms provide over 80 percent of net new jobs.[4]

Firms with fewer than 500 employees represent more than 99 percent of all employers and employ approximately one-half of the private workforce. During the past century, entrepreneurial firms' innovations included personal computers, heart pacemakers, optical scanners, soft contact lenses, and double-knit fabric. Entrepreneurial firms have long been major players in high-technology industries, where small businesses account for over one-fourth of all jobs and over one-half of U.S. innovations and new technologies. Small high-technology firms are responsible for twice as many product innovations per employee, and obtain more patents per sales dollar, than large high-technology firms. One government study suggests that some of the fastest growing opportunities for small businesses are in the restaurant industry, medical and dental laboratories, residential care industries (housing for the elderly, group homes, etc.), credit reporting, child daycare services, and equipment leasing.[5]

As much as we would like to encourage your entrepreneurial inclinations, it would be irresponsible for us to imply that starting and successfully operating a business is easy. As a basic financial principle, risk and return go together—the expectation of higher returns is accompanied by higher risks. According to the SBA's Office of Advocacy, around two-thirds of new employer businesses survive at least two years and only about one-half survive for at least five years.[6]

For additional perspective, Headd studied the U.S. Census Bureau's Characteristics of Business Owners database, which surveyed owners of closed firms on whether the owners felt their firms were successful or unsuccessful at the time of closure. The evidence suggests that about one-third of closed businesses were successful at closure. Thus, instead of closing due to bankruptcy, many owners may have exited their businesses by retiring or selling.[7]

Nearly half of business failures are due to economic factors such as inadequate sales, insufficient profits, or industry weakness. Of the remainder, almost 40 percent cite financial causes, such as excessive debt and insufficient financial capital. Other reasons include insufficient managerial experience, business conflicts, family problems, fraud, and disasters.[8]

Although the risks associated with starting a new entrepreneurial venture are large, there is always room for one more success. Successful entrepreneurs are able

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4 *Small Business Profile* (Washington, DC: U.S. Small Business Administration, Office of Advocacy, 2012). See http://www.sba.gov/sites/default/files/us11_0.pdf.

5 "Small Business Answer Card" and "The Facts about Small Business" (Washington, DC: U.S. Small Business Administration, Office of Advocacy, 2000).

6 *Small Business Facts*, http://www.sba.gov/sites/default/files/Business-Survival.pdf.

7 Brian Headd, "Redefining Business Success: Distinguishing Between Closure and Failure," *Small Business Economics* 21 (2003): pp. 51–61.

8 "Small Business Answer Card" and "The Facts about Small Business."

to anticipate and overcome the business risks that cause others to fail. While hard work and a little luck will help, an entrepreneur must be able to finance and manage the venture. Commercial vision, an unrelenting drive to succeed, the ability to build and engage a management team, a grasp of the risks involved, and a willingness to plan for the future are some of the ingredients for success.

CONCEPT CHECK

- What percentage of new businesses survive four years of operation?
- What are some of the major reasons why small businesses fail?

SECTION **1.3**

Sources of Entrepreneurial Opportunities

Entrepreneurs are the primary engine of commercial change in the global economy. **Entrepreneurial opportunities** are ideas that have the potential to create value through new, repackaged, or repositioned products, markets, processes, or services. One study of *Inc.* magazine's 500 high-growth firms suggests that about 12 percent of founders feel their firms' successes are due to extraordinary ideas, whereas the remaining 88 percent feel their firms' successes are due to exceptional execution of ordinary ideas.[9] In a separate survey, Amar Bhide found that *Inc.* 500 founders often make use of existing ideas originating in their prior work experiences. Only 6 percent of his responding founders indicate that "no substitutes were available" for their products or services. In contrast, 58 percent say they succeeded even though competitors offer "identical or close substitutes."[10]

entrepreneurial opportunities
ideas with potential to create value through different or new, repackaged, or repositioned products, markets, processes, or services

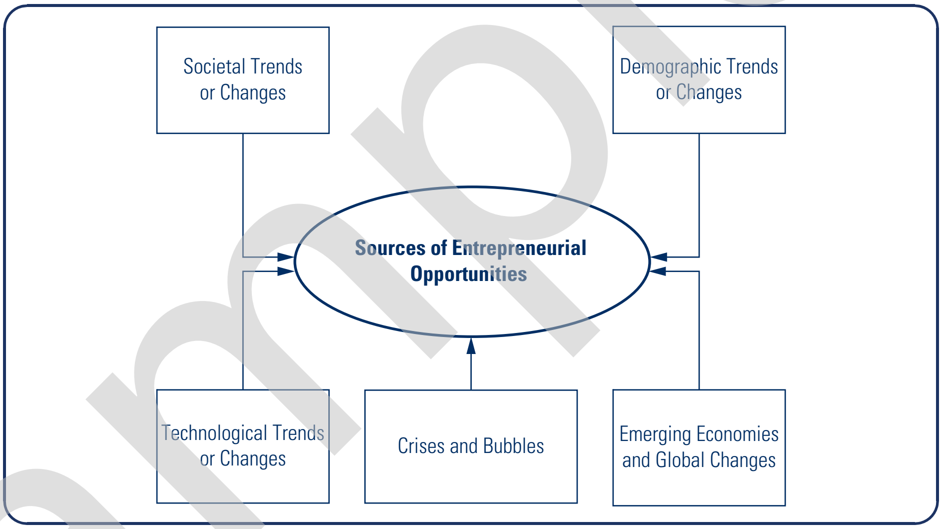
Megatrends are large societal, demographic, or technological trends or changes that are slow in forming but, once in place, continue for many years. In contrast, *fads* are not predictable, have short lives, and do not involve macro changes. Of course, there are many degrees between fads and megatrends that provide entrepreneurs with business opportunities. However, while entrepreneurial opportunities can come from an almost unlimited number of sources, we give special focus to Figure 1.2's five megatrend categories.

SOCIETAL CHANGES

Many entrepreneurial endeavors are commercial reflections of broader societal changes. In 1982, John Naisbitt identified several major trends, or megatrends, shaping U.S. society and the world.[11] Naisbitt recognized that the U.S. economy, by the early

9 J. Case, "The Origins of Entrepreneurship," *Inc.*, June 1989, p. 51.
10 Amar V. Bhide, *The Origin and Evolution of New Businesses* (New York: Oxford University Press, 2000).
11 John Naisbitt, *Megatrends* (New York: Warner Books, 1982). Although only two are presented here, Naisbitt identified six additional megatrends. For a follow-up book, see John Naisbitt and Patricia Aburdene, *Megatrends 2000* (New York: Morrow, 1990). Carol Tice, "Change Agents," *Entrepreneur* (May 2007), pp. 65–67 identified five forces that have shaped the face of entrepreneurship: during recent decades: technology (the computer), the Internet (a network to link computers), globalization (everyone can sell worldwide), baby boomers (question-authority attitudes), and individualism (corporate restructurings forced individuals to look out for themselves). A developing societal megatrend involves "the sharing economy" where individuals provide car rides, room rentals, and run errands as services to strangers for money. See Arun Sundararajan, *The Sharing Economy* (Cambridge: MIT Press, 2016).

Figure 1.2 Sources of Entrepreneurial Opportunities



1980s, centered on the creation and distribution of information. He argued that successful new technologies would center on the human response to information. Many of the commercial opportunities in the past two decades have capitalized on information creation and organization and its central role in human decision support.

Naisbitt also recognized that the United States was increasingly affected by a global economy and that Americans were rekindling the entrepreneurial spirit. It is now clear that almost all businesses face international competition and that the pace of entrepreneurial innovation is increasing throughout the world. To succeed in such an environment requires an understanding of current megatrends and the anticipation of new ones. While many possible trends are candidates for spawning entrepreneurial innovation, two that will undoubtedly influence future commercial opportunities are the demographic shifts associated with the baby boom generation and our increasingly information-oriented society.

Social, economic, and legal changes may occur within pervasive trends. Social changes are reflected in important changes in preferences about clothing styles, food (e.g., gluten-free diets), travel and leisure, housing, and so forth. An anticipation of social change is the genesis of many entrepreneurial opportunities as innovators position themselves to satisfy the demand for the related new products and services. Economic shifts—the rise of two-career families, higher disposable incomes, changing savings patterns—also suggest entrepreneurial opportunities. Changes in our legal environment can introduce important economic opportunities by eliminating existing barriers to entry. For example, deregulation in the banking, transportation, and telecommunications industries has allowed entrepreneurs to provide cost-efficient, demand-driven alternatives.

CONCEPT CHECK ▸ What are megatrends, and how do they introduce new commercial opportunities?

DEMOGRAPHIC CHANGES

One major demographic trend continuing to shape the U.S. economy is the aging of the so-called "baby boom generation." In 1993, Harry Dent documented major generation waves in the United States during the twentieth century.[12] By far, the most important generation wave is the baby boom. After World War II, from 1946 to 1964, an unprecedented number of babies, approximately 79 million, were born in the United States. As this generation has aged, it has repeatedly stressed the U.S. infrastructure. In the 1950s and 1960s, it overloaded public school systems from kindergarten through high school. By the 1970s and early 1980s, a period sometimes referred to as their innovation wave, boomers were heavily involved in developing, innovating, and adopting new technologies.

Dent estimates that the boomers' spending wave started in the early 1990s and peaked in the late 1990s and the first part of the twenty-first century. The tremendous expansion in the stock and bond markets during the 1980s and 1990s was, in part, due to these anticipated innovation and spending waves. Dent projects that the organization, or power, wave, where boomers dominate top managerial positions and possess the accumulated wealth to influence corporate America, will peak sometime in the 2020s.

For the entrepreneurially inclined, the good news is that the boomers continue to spend at record levels; "consumer confidence" is a key ingredient to America's continued prosperity and expansion. Financing continues to be available for solid business opportunities. Venture investing, although initially reeling after the decline at the turn of this century and the subsequent recession, is recovering. The aging boomers, with their earning and consumption power, continue to provide enduring business opportunities. Many of the successful entrepreneurial ventures will provide goods and services tailored to this aging, and wealthy, generation. There will undoubtedly be other business opportunities relating to as-yet unlabeled subsets of consumers. Entrepreneurs with the ability to understand demographic shifts, and see the resulting new business opportunities, will write their own success stories.

CONCEPT CHECK ► What is meant by the term "baby boom generation"?

TECHNOLOGICAL CHANGES

Technological change may be the most important source of entrepreneurial opportunities.[13] While the accurate dating of the arrival of major technological innovations is difficult, it is reasonable to say that the genesis of our information society was in the mid to late 1950s and early 1960s. Transatlantic cable telephone service began. The Soviet Union launched *Sputnik*, suggesting the possibility of global satellite communications. Transistors replaced vacuum tubes in computers. Compilers opened the door to higher-level programming languages, and the development of the computer "chip" was under way.

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12 Harry S. Dent, Jr., *The Great Boom Ahead* (New York: Hyperion, 1993). Also see Harry S. Dent, Jr., *The Roaring 2000s* (New York: Simon & Schuster, 1998).

13 For example, see Scott Shane, "Explaining Variation in Rates of Entrepreneurship in the United States: 1899–1988," *Journal of Management* 22 (1996): pp. 747–781; and Scott Shane, "Technology Opportunities and New Firm Creation," *Management Science* 47 (2001): pp. 205–220. See Walter Isaacson, *The Innovators* (New York: Simon and Schuster, 2014) for how the digital revolution was created.

Perhaps the most important invention in shuttling us from an industrial society to an information society was the computer chip.[14] Such chips are the backbone of all modern computing and enable the telecommunications applications and information systems that have changed the way almost everyone lives. The worldwide distribution of computer chips (and the software systems running on them) has paved the way for what may be the most significant innovation in global commerce since the merchant ship: the Internet. The Internet is an incredibly diffuse collection of computers networked together. It is hard to think of anything else in history that parallels the level of international coordination (individuals and entities) that the Internet has almost painlessly achieved, and in a remarkably short time.[15] When the Internet's ability to provide nearly instant worldwide communication was combined with rapid transfer of graphic images, the Internet became the infrastructure for the "World Wide Web," a user-friendly and commercially attractive foundation for many new ways of doing business, including retail and wholesale operations through electronic commerce. In addition to the Web's commercial applications, the Internet has dramatically changed the way almost everyone goes about daily business. Internet functionality affects modern life in almost uncountable ways, including such common things as electronic mail (e-mail), remote access, large file transfer (including pictures, music, and videos), instant messaging, and, more recently, cell phone–Web cross-functionality.

e-commerce
the use of electronic means to conduct business online

Electronic commerce, or **e-commerce**, involves the use of electronic means to conduct business online. Although many of the simple "dot.com" and "e-commerce" business models of the late 1990s did not work, the Internet economy and e-commerce are here to stay. Simply put, we will never do business the same way we did before the Internet. It has become too easy to compare various suppliers' prices or check on the latest offer from our competitors to return to conducting business in the "darkness" tolerated only a few years ago. A simple example is online package tracking. Now, instead of using the phone to say a package is "in the mail," the sender is expected to provide a tracking number to be used on the Web so that the sender and the receiver can ascertain the veracity of this claim *and* follow the package along its route.

Attention continues to shift from the age-old strategy of owning and controlling natural resources (tangibles), to a strategy of owning and controlling information (intangibles). Even Internet entrepreneurs who started their ventures intending to sell products and services have sometimes found themselves giving their products and services away in order to monitor their "users" and sell user demographic information. Information is central in the modern global economy.

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14 The U.S. Patent Office appears to recognize Jack Kilby and Robert Noyce as the computer chip's co-inventors. Kilby conducted research at Texas Instruments during the 1950s and filed for the first "computer chip" patent. Noyce filed after Kilby, but supposedly had a more useful design. Noyce later cofounded the Intel Corporation. See Lee Gomes, "Paternity Suits Some Better Than Others in the Invention Biz," *Wall Street Journal,* June 18, 1999, pp. A1, A10.

15 The Internet had its beginning in late 1969 when researchers at UCLA, including Professor Leonard Kleinrock and graduate students Stephen Crocker and Vinton Cerf, linked two computers for purposes of exchanging data. This initial network project, supported by the Department of Defense (DOD), was given the name Arpanet for Advanced Research Projects Agency Network. Other milestones include the inventing of network e-mail in 1971 and the use of the "@" symbol in 1972. Cerf and Robert Kan invented the TCP protocol used in transporting data via the Internet in 1974. In 1982, the "Internet" was defined as a series of TCP/IP networks that were connected. In 1990, Tim Berners-Lee invented the World Wide Web, and Arpanet ceased to exist. The commercial explosion really began after the creation of modern server software, hypertext markup language (HTML), and browsers (such as Mosaic, Netscape, and Internet Explorer). See Anick Jesdanun, "Happy Birthday to the Internet," *Daily Camera,* August 30, 2004, pp. 1B, 5B.

While new technologies suggest business opportunities, profitable commercial application of the new technologies often occurs after trial and error. Many attempts to exploit the Internet commercially were proposed, tried, and funded. Eventually, there was a wave of potentially appealing applications—and the vision was contagious. We are still trying to determine the winners. That is, we know the Internet provides significant efficiency improvements for commercial interaction; we're just not sure whether the winners are buyers, sellers, or both. The Web lets suppliers compete for consumers' business, putting the consumer in an advantageous position. It is not clear whether this benefits suppliers in the long run.

It is fair to say that many e-commerce business plans were funded with the belief that part of the benefit could be captured by sellers; that is, producers and retailers. We now know that the Web so effectively facilitates price competition that it is hard for suppliers and retailers to protect margins. Much of the efficiency gains go to the buyers (in what economists call consumer surplus), making for a less-than-attractive seller business model. Although such a plan might have received funding a few years ago, building an e-commerce site to sell undifferentiated goods at lower prices than are currently available is now a nonstarter. An important characteristic of the Internet is that physical barriers to entry are very low. That is, it is easy and relatively low cost to launch a competing Web e-commerce site. If your business model doesn't have a sustainable purchasing cost advantage, the Internet may help defeat your business model because it allows scores of other retailers to quickly monitor and replicate whatever you're doing and drive everyone toward aggressive price competition and diminishing margins.

E-commerce may not deliver the margins once conjectured, but the Internet is still one of the most radical innovations in our lifetime. Expect it to provide profitable new venture opportunities for many years to come—consumers are probably hooked forever.

CONCEPT CHECK

- What innovations drove our move from an industrial society to an information society? Why?
- Why is e-commerce here to stay?

EMERGING ECONOMIES AND GLOBAL CHANGES

One of the most notable changes in recent years is the emergence of substantial demand in emerging economies including those of BRICS countries (Brazil, Russia, India, China, and South Africa). Rapid growth in these economies and the rise of an increasingly consumption-mindful middle class has created an unprecedented demand for consumer goods. Of course, the rise in industrial output has increased these countries' demands for raw materials, energy, and industrial goods as well.

While maturation and a global slowdown may have diminished the focus on BRICS countries, attention is increasing on other emerging economies that may provide new sources of industrial and consumer demand. Recently, the acronym "CIVETS" came into wider usage to focus attention on the economies of Columbia, Indonesia, Vietnam, Egypt, Turkey, and South Africa (the only BRICS country to be included).[16] In its recent

16 See http://edition.cnn.com/2013/03/27/business/brics-civets-emerging-markets, accessed on 6/5/2013.

report "World in 2050, The BRICs and Beyond: Prospects, Challenges and Opportunities" PricewaterhouseCoopers summarized it key findings as[17]:

1. Global average growth will be just over 3% from 2011 to 2050.
2. China will be the largest economy by 2017 in purchasing power parity (PPP) and by 2027 in market exchange rate (MER) terms.
3. India will be number three by 2050.
4. Brazil will be number four by 2050, overtaking Japan.
5. Russia will overtake Germany as the largest European economy by 2020 (PPP) and 2035 (MER).
6. Mexico and Indonesia may exceed the United Kingdom and France by 2050, with Turkey exceeding Italy.
7. Vietnam, Malaysia, and Nigeria have great promise, and Poland may outpace Western Europe.

In our global economy, growth opportunities will shift over time. For the watchful entrepreneur, emerging economy demand provides opportunities for establishing and expanding a venture's lines of business. Awareness of the shifts and a readiness to exploit new avenues of demand for a venture's products and services is an important aspect of being an entrepreneur in today's global economy.

CRISES AND "BUBBLES"

The first decade of the twenty-first century was characterized by extreme economic swings accompanied by, among other things, the bursting of several asset and financial "bubbles," the 9/11 terrorist attack on the United States, and the 2007–2009 financial crisis. Cost-cutting coupled with economic growth during the 1990s led to the availability of excessive amounts of financial capital as the twentieth century came to an end. Venture investors were chasing poorer investment opportunities than those to which they had become accustomed. Stock prices of Internet or "tech" firms rose much faster than those firms' abilities to generate earnings and cash flows. As a result, the "dot.com" or Internet bubble burst in 2000.[18] Venture funding dried up to at a mere trickle relative to the amounts flowing during the dot.com era. Many entrepreneurs with good potential opportunities were unable to find funding.

When the dot.com economy was faltering, an economic recession that began in 2001 was exacerbated by the 9/11 terrorist attack. In response, the Federal Reserve moved quickly to increase liquidity and lower interest rates. Government spending was increased, and tax cuts were implemented in 2002. Government officials encouraged lenders to make mortgage loans to a wider range of potential home buyers, resulting in sub-prime mortgages being offered to borrowers who could not afford the loans. Economic expansion and rapidly rising home prices culminated in the bursting of the housing asset bubble in 2006. This was followed by a peak in stock prices in 2007 and an economic recession that began in mid-2008.

By the second half of 2008, a "perfect financial storm" had been created, and many worried about the possibility of financial collapse. Several major financial institutions were on the verge of failing. Some financial institutions were merged into,

17 See http://www.pwc.com/en_GX/gx/world-2050/assets/pwc-world-in-2050-report-january-2013.pdf, accessed on 6/5/2013.

18 For an example of the extreme developments, see "10 Big Dot.Com Flops," http://money.cnn.com/galleries/2010/technology/1003/gallery.dot_com_busts/index.html, accessed 6/5/2013.

or acquired by, stronger institutions (e.g., Merrill Lynch was acquired by Bank of America), the Lehman Brothers investment bank was allowed to fail, while AIG (American International Group) was "bailed out" by the Federal Reserve and the U.S. government. Venture funding virtually dried up. Even entrepreneurs with good opportunities were stymied by a lack of venture capital. For the second time in the decade, the availability of venture funds collapsed.

In October 2008, the U.S. government responded by passing the Economic Stabilization Act of 2008, which provided funds to the U.S. Treasury to purchase "troubled" financial assets held by institutions. The American Recovery and Reinvestment Act (ARRA) was passed in February 2009 and provided for tax incentives, appropriations, and increased government spending in an effort to stimulate economic expansion.

Importantly for aspiring entrepreneurs, these dark and cloudy times almost always come with a silver lining. For this most recent financial crisis, it appears that one nascent sector that benefitted dramatically during the time of crisis was alternative and renewable energy. Subsidies abounded with project credits, production and investment tax credits, and loan guarantees.

Additionally, even in the absence of crisis-related government favoritism for certain sectors, while many entrepreneurs suffer dearly as their ventures fail, others benefit from consolidation and the resulting lower level of competition due to the shakeout. Many aspiring entrepreneurs and investor connections are made during the fallout from major economic crises.

CONCEPT CHECK

- What asset and financial "bubbles" have occurred recently?
- What kinds of entrepreneurial opportunities have occurred as a result of government efforts to stimulate the economy after the 2007–2009 financial crisis?

DISRUPTIVE INNOVATION

An **innovation** involves the introduction of a new idea, product, or process. Clayton Christensen is credited with introducing and defining the term **disruptive innovation**, which is an innovation that creates a new market or network that disrupts and displaces an existing market or network.[19] Recent examples of successful disruptive innovations include Airbnb and Uber. The lodging industry served travelers for many years through large organized chains and smaller outlets that often joined reservation networks. Airbnb developed a Web site that allows people to list and rent their homes for lodging use to others. The result has been a disruption in the traditional lodging industry.

innovation
introduction of a new idea, product, or process

disruptive innovation
an innovation that creates a new market or network that disrupts and displaces an existing market or network

The taxi industry has traditionally provided people desiring car rides with transportation via companies who had obtained from government regulators the right to offer such transportation services. However, combining the use of smart phones with

19 Joseph L. Bower and Clayton M. Christensen, "Disruptive Technologies: Catching the Wave," *Harvard Business Review* (January–February 1995), pp. 43–53. Early reference to "disruptive technologies" was soon replaced by the use of "disruptive innovation." Also, see Clayton M. Christensen, Michael E. Raynor, and Rory McDonald, "What Is Disruptive Innovation?" *Harvard Business Review* (December 2015), pp. 44–53. See Arun Sundararajan, The Sharing Economy, op. cit. for disruptive applications involving the "sharing economy" societal trend.

individuals willing to provide rides in their personal vehicles allowed Uber and other similar companies to develop networks that disrupted the traditional taxi business. Potential innovations that might disrupt existing markets or networks represent another source of possible entrepreneurial opportunities.

SECTION **1.4**

Principles of Entrepreneurial Finance

Entrepreneurial finance draws its basic principles from both entrepreneurship and finance. New ventures require financial capital to develop opportunities, start business ventures, and create value. It takes time to build value. Investors expect to be compensated for the use of their capital and for the risk that they might not get it back. Developing a successful entrepreneurial venture is best accomplished without the sacrifice of individual character and reputation. As the venture grows, conflicts can arise between owners and managers, and between owners and debtholders.

We emphasize seven principles of entrepreneurial finance:

1. Real, human, and financial capital must be rented from owners.
2. Risk and expected reward go hand in hand.
3. While accounting is the language of business, cash is the currency.
4. New venture financing involves search, negotiation, and privacy.
5. A venture's financial objective is to increase value.
6. It is dangerous to assume that people act against their own self-interests.
7. Venture character and reputation can be assets or liabilities.

REAL, HUMAN, AND FINANCIAL CAPITAL MUST BE RENTED FROM OWNERS (PRINCIPLE #1)

While it is true that commercial innovation exists outside the capitalist market context pervading the global economy, we will confine our remarks to that market context. When you obtain permission to use someone's land and building (real capital), you have to compensate the owner for the loss of its use otherwise. If there are many suppliers of buildings and many possible tenants, competition among them facilitates the allocation of the building to a commercially worthy purpose. While this may be obvious regarding buildings, it is equally true for money (financial capital). The *time value of money* is an important component of the rent one pays for using someone else's financial capital. When you rent the money, it cannot be rented to others, and you must expect to compensate the money's owner for that loss.

Entrepreneurs usually understand that quitting their day jobs and starting new ventures entails the loss of regular paychecks. They will, in some fashion, expect the venture experiences to compensate them for this loss. We recommend that they each insert a line item for a fair wage for their services in their financial projections, although we realize that there are other non-pecuniary compensations at work. What may not be well understood is that a founder's own financial capital invested in the firm deserves a fair compensation. The seed money used to start the venture could have been put to use elsewhere to earn interest. The venture should expect to compensate *all* investors for using their financial capital. This is conceptually separate from any compensation for services rendered if the investors are also employees (human capital).

RISK AND EXPECTED REWARD GO HAND IN HAND (PRINCIPLE #2)

The time value of money is not the only cost involved in renting someone's financial (or other) capital. The total cost is typically significantly higher due to the possibility that the venture won't be able to pay. The rent is risky. One way humans express their dislike of this risk is to expect more when the rent is riskier. If the U.S. government promises $0.05 for borrowing a dollar for a year, you can bet it will be virtually impossible to get someone to rent it to a risky new venture for that same $0.05 per year. The expected compensation for the risk involved in renting money to a new venture is the basis of the concept of the time value of money. For example, a new venture investor might expect to get $0.25 or even more per year for the use of her money at the same time the government is promising $0.05. While this expectation may annoy you, it is set by competitive markets, and you don't have a lot of room to argue—if you want the money to build your new venture.

WHILE ACCOUNTING IS THE LANGUAGE OF BUSINESS, CASH IS THE CURRENCY (PRINCIPLE #3)

If you were going to be a missionary to a foreign country where a language other than English was the official language, you would probably take the time and effort to learn the language. Whether you like it or not—and many finance professors don't like it—accounting is the official language of business. It has a long and honorable history, and most of its practitioners believe in the basic principle that using accounting techniques, standards, and practices communicates a firm's financial position more accurately than if those customs were ignored. Accounting for entrepreneurial firms has two purposes. The first is the same as for any other business: to provide for checks, balances, integrity, and accountability in tracking a firm's conduct. We leave discussion of that aspect of entrepreneurial accounting to others. The second purpose, and our emphasis for the entrepreneurial finance context, is to quantify the future in a recognizable dialect of the official language. The reality is that entrepreneurs need to be able to quantify certain aspects of their venture's future and translate them into appropriate financial statements.

Although we recommend bending the knee to accounting when communicating a venture's vision to the financial community, we recognize that the day-to-day financial crises usually are about only one balance sheet account: cash. Cash here usually refers to bank balances and other highly liquid assets that can be quickly converted into cash.

For example, while the income statement may look great when we book an additional $50,000 sale, the real concern will be how much, if any, was paid in cash. To be more specific, if the sale was on account, it will help at some time in the future when collected, but it can't be used to make payroll tomorrow. Rather than as a criticism of accounting, however, we present this as a challenge to entrepreneurs: Get enough accounting to see through the accruals to the cash account. Accounting is not your enemy. It may take some investment for it to become your friend, but you may be surprised how attached you become.

Entrepreneurs often underestimate the amount of cash needed to get their ventures up and running. Consequently, we supplement traditional accounting measures—such as profit and return on investment—with measures that focus on what is happening to cash. *Cash burn* measures the gap between the cash being spent and that being collected from sales. It's typical for new ventures to experience a large cash burn, which is why they must seek additional investment from outsiders. Ultimately, to create value, a venture must produce more cash than it consumes. *Cash build* measures the excess of cash receipts over cash disbursements, including payments for additional investment.

NEW VENTURE FINANCING INVOLVES SEARCH, NEGOTIATION, AND PRIVACY (PRINCIPLE #4)

public financial markets

where standardized contracts or securities are traded on organized securities exchanges

Much of corporate finance deals with the financial decisions of public companies raising money in **public financial markets** where a large number of investors and intermediaries compete. Corporate finance concentrates much of its attention on public financial markets where standardized contracts or securities are traded on organized securities exchanges. In such markets, publicly traded prices may be considered good indicators of true values; investors who disagree are free to buy and sell the securities to express their sentiments to the contrary. We say that these public markets exhibit efficiency (i.e., prices reflect information about the company or its industry) and liquidity (i.e., investors who disagree with prevailing prices can buy and sell the security to express their objection).

Corporate finance tends to downplay, or even ignore, significant frictions in the markets for new venture financial capital. New ventures seldom have standby financing waiting to fill any gaps. Most are actively engaged in searching for financing. When they do find potential investors, competition is weak and this leads to bargaining between the venture and its investors. Even after a deal is struck, the venture and its investors typically are locked into the funding arrangement, because the securities are privately placed (sold) and cannot easily be resold or repurchased to express satisfaction or discontent with the venture's progress. New ventures usually arrange financing in **private financial markets**. We often characterize such markets as relatively inefficient (prices may not reflect significant information known to the venture or its investors) and illiquid (investors who disagree cannot easily sell or buy to express discontent or approval). New venture financing tends to require serious research, intricate and invasive negotiation, and indefinitely long investing horizons for those buying the resulting privately held securities.

private financial markets

where customized contracts or securities are negotiated, created, and held with restrictions on how they can be transferred

A VENTURE'S FINANCIAL OBJECTIVE IS TO INCREASE VALUE (PRINCIPLE #5)

Entrepreneurs can start new ventures for a host of personal reasons. They may have economic or altruistic motives. Many serial entrepreneurs may see the challenge as the biggest reason to start their next venture. It is only realistic to acknowledge that there can be many nonfinancial objectives for a new venture. Nonetheless, whatever the myriad personal motivations for founders, investors, and employees, there is really only one overarching *financial* objective for the venture's owners: to increase value. While all the owners might not agree on social objectives (e.g., improving local employment or wages versus international outsourcing), environmental objectives (e.g., providing an alternative delivery system using only recyclables versus providing cheaper products), or other perfectly valid new venture considerations, if there were a way to increase the venture's value by $1 without interfering with these other nonfinancial objectives, all of the owners would want to take the $1.

There are other candidates for a venture's financial objective, including maximizing sales, profit, or return on investment. It is easy to understand why these measures don't quite summarize how venture owners feel about the venture's financial performance. Increasing sales seems to be good, but not at the cost of greatly diminished margins. Profit is a better candidate than sales, but it still doesn't provide an adequate summary. If a venture is profitable, but has to reinvest so much in assets that no return is available to pay the owners for the use of their money, profits don't thrill the owners as much as one might think. At some point, profit has to give rise to *free cash* to be returned to investors *in a timely manner.* Profits alone are not a good indicator of owner sentiment. The problem with having return on investment as the venture's financial objective is similar. When the profit is divided by the book value of equity, one finds the return on equity. If a venture started on a shoestring, currently has very little operating history, but has created incredibly valuable intellectual property, you would never want to use the venture's return on equity as a serious input in deciding how much to ask from an interested potential acquirer. Return on equity will be low because profits are nonexistent and there is some book value of equity. Return on equity, particularly in new ventures, can be a very poor proxy for what owners care about: value.[20]

We said that profits must eventually turn into free cash in order to be available to provide a return to a venture's owners. More formally, **free cash** (or "surplus cash") is the cash exceeding that which is needed to operate, pay creditors, and invest in the assets. **Free cash flow** is the change in free cash over time.[21] We deal mostly with financial projections; accordingly, we will use *free cash flow* instead of the more accurate *projected free cash flow.* When we line up free cash flows and adjust them for risk and the time value of money, we get value—the best proxy for common owner sentiment regarding a venture's prospects.

free cash
cash exceeding that which is needed to operate, pay creditors, and invest in assets

free cash flow
change in free cash over time

CONCEPT CHECK
- What is meant by free cash and free cash flow?
- How does risk affect an entrepreneurial venture's value?

IT IS DANGEROUS TO ASSUME THAT PEOPLE ACT AGAINST THEIR OWN SELF-INTERESTS (PRINCIPLE #6)

Economics is often regarded as a heartless discipline in which the view of human nature is that people are motivated primarily by greed and self-interest. We do not propose to debate such a claim here. However, having just said that increasing value

20 Chapter 10 and Learning Supplement 10A provide a more rigorous exposition of how financial markets can resolve arguments between a venture's owners and create a consensus on how the venture should develop and invest. The interesting point in this resolution is that, in the presence of tradable financial assets, all of the firm's owners can agree on maximizing firm value as the venture's *financial* objective.

21 When we use the term "free cash flow" in this text, we are referring to free cash flow to the owners or equity investors in the venture, unless specified otherwise. We discuss in great detail the process of valuing a venture using free cash flow to equity investors in Chapter 10. An alternative definition of free cash flow focuses on free cash flow available to interest-bearing debt holders and equity investors. This approach values the entire venture or enterprise and is discussed in Chapter 14.

is the owners' primary financial objective, perhaps we should explain what we see as self-interest's role in our principles of entrepreneurial finance. Rather than take a position on the ethical, religious, or philosophical underpinnings of the economic view of human behavior, we prefer to introduce the subject as a warning. When incentives are aligned, the presence of self-interest, even of moral or religious interest, is not at odds with economic incentives. When it's good for me to do a good job for you, we can debate the morality of my motives, but the likely result is that I will do a good job for you.

In contrast, when doing a good job for you involves wrecking my family, living in poverty, and seeking counseling, you should expect me to renegotiate, increase my risk taking, cut corners, and possibly even out-and-out default. We are neither condoning nor condemning such behavior; we are simply pointing out that incentives need to be aligned because ignoring self-interest is not a good idea. To put this in a financial context, there will be many times when financial and operational arrangements have to be renegotiated. This should be expected. It is unwise to assume that arrangements are durable in the new venture context. Owners will need to constantly monitor incentive alignments for everyone associated with the venture and be ready to renegotiate to improve failing alignments.

Of particular concern is when the need for external capital dictates that the entrepreneur give up some control of the venture at an early stage. To keep incentives aligned, it is common to provide contingent increases in the entrepreneur's ownership (e.g., through options grants) to improve the tie between her self-interest and the majority owners' interests. Watching out for managers' and other employees' self-interest usually dictates providing them with contingent options grants as the venture reaches milestones. Venture teams typically sacrifice lifestyle and leisure during the early stages. It is wise to allow them to visualize a future reward for their sacrifices. These future rewards are almost uniformly structured to help solve **owner–manager (agency) conflicts** in the new venture context.

owner–manager (agency) conflicts

differences between manager's self-interest and that of the owners who hired him

Although not as common in the earliest-stage ventures, different types of investors can have dramatically different incentives depending on how their investments are structured. Perhaps the easiest way to see the potential for significant conflict and renegotiation is to consider a venture that has borrowed money to help fund itself (from friends, personal loans, or even credit cards). The **owner–debt holder conflict** is the divergence of the owners' self-interest from that of the lenders as the firm approaches bankruptcy. Although it's an extreme example, if the venture is indebted and doesn't have the cash to pay rent and payroll the following morning, it may be tempted to take whatever money it has and buy lottery tickets in the hopes of making rent and payroll. If the venture doesn't make rent and payroll, it will fold and the owners won't get anything. If they do nothing, they won't make payroll. If they take what little cash is left and buy lottery tickets, it costs them nothing and provides some chance that there will be value to their ownership tomorrow.

owner–debt holder conflict

divergence of the owners' and lenders' self-interests as the firm gets close to bankruptcy

We are not advocating the purchase of lottery tickets; we're simply suggesting that it would be prudent to expect this type of behavior in certain circumstances. We chose the extreme example to make a point: Everyone should keep an eye on others' self-interests and, when feasible, take steps to align incentives. If incentives aren't aligned, it is unwise to assume that temptation to cater to self-interest will be overcome. It would be best to anticipate the incentive conflicts and renegotiate to minimize value-destroying behavior.

CONCEPT CHECK
- What is the owner–manager (agency) conflict?
- What is the owner–debt holder conflict?

VENTURE CHARACTER AND REPUTATION CAN BE ASSETS OR LIABILITIES (PRINCIPLE #7)

While it is customary to talk about individual character, we think it is useful to point out that most of us characterize businesses as well. These characterizations, and the reputation associated with those characterizations, can grow and evolve as others accumulate evidence on how the individuals and the entity behave. Simple things, such as honest voice mail, on-time delivery and payment, courteous internal and external discourse, and appropriate e-mail etiquette, can be the building blocks for favorable venture character and reputation.

Of course, we all know that character goes both ways. A venture's negative character will be difficult or impossible to hide; customers, employers, and others can be expected to engage in substantially different behavior when doing business (if at all) with ventures having weak or negative characters. One doesn't have to look further than eBay auctions to see that buyers and sellers will treat you differently if you haven't substantiated your character in prior commercial interactions or, worse yet, you have exhibited bad or negative character.

One survey of successful entrepreneurs indicated that a majority felt that having high ethical standards was the most important factor in the long-term success of their ventures.[22] Taking the time and money to invest in the venture's character will help ensure that it is an asset rather than a liability. Of course, it will be easier to build positive venture character if the founders possess that quality as individuals. In the earliest stages, the venture's character and the founders' character tend to coincide.

Is the financial objective of increasing value necessarily inconsistent with developing positive character and reputation? Certainly not! The typical situation is quite the opposite. It will be very difficult to increase value—an amount reflecting *all* of the venture's future economic interactions—if a venture does not pay sufficient attention to issues of character. Following laws, regulations, and responsible marketing and selling practices builds confidence and support for the entrepreneur and the venture. Having a good reputation can eliminate much of the hedging and frictions that result when a venture has unproven or negative character.

On a related issue, increasing a venture's value need not conflict with the venture's ability to improve the society in which it operates. Entrepreneurial firms provide meaningful work and many of the new ideas, products, and services that improve our lives. Success in the marketplace not only provides prima facie evidence that someone (the customer) benefited from the venture's goods and services; it also creates wealth that can be used to continue the process or fund noncommercial endeavors. It is no secret that successful entrepreneurs are prime targets for charitable fundraising. Some firms, including Newman's Own and Pura Vida, were organized

22 Jeffry A. Timmons and Howard H. Stevenson, "Entrepreneurship Education in the 1980s," *75th Anniversary Entrepreneurship Symposium Proceedings* (Boston: Harvard Business School, 1983), pp. 115–134. For further discussion, see Timmons and Spinelli, *New Venture Creation,* chap. 10.

to sell goods and services in a competitive marketplace while designating charities as the recipients of the financial returns to ownership. Although the charities don't own the firms, they receive the financial benefit of ownership.[23] Increasing these ventures' values is the same as increasing the value of the stream of cash support promised to the charities. It need not be the case that ventures' financial objectives conflict with their nonfinancial objectives. Most ventures will not be organized with the explicit objective of benefiting charities. Nevertheless, new ventures can and do provide dramatic benefits to society, not just to their customers.

CONCEPT CHECK ► Why is venture character important?

SECTION 1.5

Role of Entrepreneurial Finance

entrepreneurial finance
application and adaptation of financial tools and techniques to the planning, funding, operations, and valuation of an entrepreneurial venture

Entrepreneurial finance is the application and adaptation of financial tools, techniques, and principles to the planning, funding, operations, and valuation of an entrepreneurial venture. Entrepreneurial finance focuses on the financial management of a venture as it moves through the entrepreneurial process. Recall from Figure 1.1 that the successful entrepreneurial process involves developing opportunities, gathering the necessary assets, human capital, and financial resources, and managing and building operations with the ultimate goal of valuation creation. Operating costs and asset expenditures incurred at each stage in the entrepreneurial process must somehow be financed.

financial distress
when cash flow is insufficient to meet current debt obligations

Nearly every entrepreneurial firm will face major operating and financial problems during its early years, making entrepreneurial finance and the practice of sound financial management critical to the survival and success of the venture. Most entrepreneurial firms will need to regroup and restructure one or more times to succeed. **Financial distress** occurs when cash flow is insufficient to meet current liability obligations. Alleviating financial distress usually requires restructuring operations and assets or restructuring loan interest and scheduled principal payments. Anticipating and avoiding financial distress is one of the main reasons to study and apply entrepreneurial finance.

Generating cash flows is the responsibility of all areas of the venture—marketing, production/engineering, research and development, distribution, human resources, and finance/accounting. However, the entrepreneur and financial manager must help other members of the entrepreneurial team relate their actions to the growth of cash flow and value.[24] The financial manager is normally responsible for keeping the venture's financial records, preparing its financial statements, and planning its

23 Variants of the venture philanthropy model also have been created. For example, Ben Cohen, a cofounder of Ben & Jerry's Ice Cream, formed an investment fund that would buy firms operating in low-income areas with the intent of raising wages and employee benefits. The intent was to use profits to buy and operate other firms in the same way. See Jim Hopkins, "Ben & Jerry's Co-Founder to Try Venture Philanthropy," *USA Today,* August 7, 2001, p. B1.

24 Although the entrepreneur typically serves as the venture's "chief operating officer," the entrepreneur may also assume management responsibility over one of the functional areas, including serving as the venture's financial manager.

financial future.[25] Short-run planning typically involves projecting monthly financial statements forward for one to two years. The venture needs adequate cash to survive the short run. Financial plans indicate whether the venture is expecting a cash shortage. If so, the entrepreneur should seek additional financing to avert the shortage. Long-term financial planning typically involves projecting annual statements five years forward. While the reliability of longer-term projections may be lower, it is still important to anticipate large financial needs as soon as possible. Meeting those needs may dictate several rounds of financing in the first few years of operations.

The financial manager is responsible for monitoring the firm's operating efficiency and financial performance over time. Every successful venture must eventually produce operating profits and free cash flows. While it is common for a new venture to operate at a loss and deplete its cash reserves, it cannot continue indefinitely in that state. Venture investors, particularly in our post-dot.com age, expect ventures to have business models generating positive free cash flows in relatively short order. As the venture progresses through its early stages, it must control expenses and investments to the extent possible without undermining projected revenues.

In summary, financial management in an entrepreneurial venture involves record keeping, financial planning, monitoring the venture's use of assets, and arranging for any necessary financing. Of course, the bottom line of all these efforts is increasing the venture's value.

CONCEPT CHECK

- What is entrepreneurial finance?
- What are the financial management responsibilities of the financial manager?

SECTION **1.6**

The Successful Venture Life Cycle

Successful ventures frequently follow a maturation process known as a life cycle. The **venture life cycle** begins in the development stage, has various growth stages, and "ends" in an early-maturity stage. The five life cycle stages are:

- Development stage
- Startup stage
- Survival stage
- Rapid-growth stage
- Early-maturity stage

Early-stage ventures are new or very young firms with limited operating histories. They are in their development, startup, or survival life cycle stages. **Seasoned firms** have produced successful operating histories and are in their rapid-growth or maturity life cycle stages.

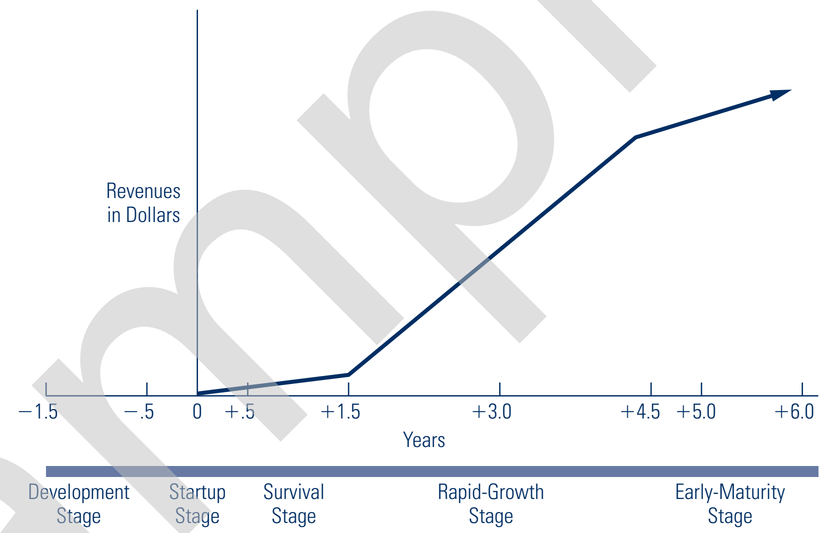
venture life cycle
stages of a successful venture's life from development through various stages of revenue growth

early-stage ventures
new or very young firms with little operating history

seasoned firms
firms with successful operating histories and operating in their rapid-growth or maturity life cycle stages

25 For ventures in the development or startup stage, one individual typically is responsible for both basic accounting and financial management functions. However, as ventures succeed and grow, the accounting and finance functions often are separated, in part because of the sheer amount of record keeping that is required, particularly if a venture becomes a public corporation.

Figure 1.3 Life Cycle Stages of the Successful Venture



A successful venture's life cycle often is expressed graphically in terms of the venture's revenues. Figure 1.3 depicts the five basic stages in a successful business venture's life cycle over an illustrated time period ranging from one and one-half years before startup up to about six years after startup. Some ideas may take less or more time to develop, and the various operating life cycle stages for a particular venture may be shorter or longer depending on the product or service being sold.

For the typical venture, operating losses usually occur during the startup and survival stages, with profits beginning and growing during the rapid-growth stage. Free cash flows generally lag operating profits because of the heavy investment in assets usually required during the first part of the rapid-growth stage. Most ventures burn more cash than they build during the early stages of their life cycles and don't start producing positive free cash flows until the latter part of their rapid-growth stages and during their maturity stages. Throughout this book, we address stage-specific aspects of a venture's organizational, operational, and financial needs from the viewpoint of entrepreneurial finance.

DEVELOPMENT STAGE

development stage

period involving the progression from an idea to a promising business opportunity

During the **development stage**, the venture progresses from an idea to a promising business opportunity. Most new ventures begin with an idea for a potential product, service, or process. The feasibility of an idea is first put on trial during the development stage. Comments and initial reactions from friends and family members (and entrepreneurship professors) form an initial test of whether the idea seems worth pursuing further. The reaction and interest level of trusted business professionals provides additional feedback. If early conversations evoke sufficient excitement (and, sometimes, even if they don't), the entrepreneur takes the next step: producing a prototype, delivering a trial service, or implementing a trial process.

In Figure 1.3, the development stage is depicted as occurring during the period of –1.5 to –0.5 years (or about one year at most, on average) prior to market entry. Of course, the time to market is often a critical factor in whether a new idea is converted to a successful opportunity. For example, a new electronic commerce idea might move from inception to startup in several weeks or months. For other business models, the venture may spend considerably more time in the development stage.

STARTUP STAGE

The second stage of a successful venture's life cycle is the **startup stage**, when the venture is organized, developed, and an initial revenue model is put in place. Figure 1.3 depicts the startup stage as typically occurring between years –0.5 and +0.5. In some instances, the process of acquiring necessary resources can take less than one year. For example, a business venture requiring little physical and intellectual capital and having simple production and delivery processes might progress from the initial idea to actual startup in one year or less. Revenue generation typically begins at what we have designated "time zero," when the venture begins operating and selling its first products and services.

startup stage
period when the venture is organized and developed and an initial revenue model is put in place

SURVIVAL STAGE

Figure 1.3 places the survival stage from about +0.5 to +1.5 years, although different ventures will experience different timing. During the **survival stage**, revenues start to grow and help pay some, but typically not all, of the expenses. The gap is covered by borrowing or by allowing others to own a part of the venture. However, lenders and investors will provide financing only if they expect the venture's cash flows from operations to be large enough to repay their investments and provide for additional returns. Consequently, ventures in the survival stage begin to have serious concerns about the financial impression they leave on outsiders. Formal financial statements and planning begin to have useful external purposes.

survival stage
period when revenues start to grow and help pay some, but typically not all, of the expenses

RAPID-GROWTH STAGE

The fourth stage of a successful venture's life cycle is the **rapid-growth stage**, when revenues and cash inflows grow very rapidly. Cash flows from operations grow much more quickly than do cash outflows, resulting in a large appreciation in the venture's value. This rapid growth often coincides with years +1.5 through +4.5. Ventures that successfully pass through the survival stage are often the recipients of substantial gains in market share taken from less successful firms struggling in their own survival stage. Continued industry revenue growth and increased market share combine to propel the venture toward its lucrative financial future. During this period in a successful venture's life cycle, value increases rapidly as revenues rise more quickly than expenses. The successful venture reaps the benefits of economies of scale in production and distribution.

rapid-growth stage
period of very rapid revenue and cash flow

EARLY-MATURITY STAGE

The fifth stage in a successful venture's life cycle is the **early-maturity stage**, when the growth of revenue and cash flow continues, but at much slower rates than in the rapid-growth stage. Although value continues to increase modestly, most venture value has already been created and recognized during the rapid-growth stage. Figure 1.3 depicts the early-maturity stage as occurring around years +4 and +5. The early-maturity stage often coincides with decisions by the entrepreneur and other investors to exit the venture through a sale or merger.

early-maturity stage
period when the growth of revenue and cash flow continues but at a much slower rate than in the rapid-growth stage

We have truncated the venture at the end of six years in Figure 1.3 for illustrative purposes only. Our focus is the period from the successful venture's development stage through its early-maturity stage, when the founders and venture investors decide whether to exit the venture or to remain at the helm. Of course, the successful venture may provide value to the entrepreneur, or to others if the entrepreneur has sold out, for many years in the future and thus have a long total maturity stage.

A caveat is in order. Figure 1.3 represents a hypothetical length of time it takes for successful ventures to progress through development into maturity. The rapid pace of technological change shortens the life span of most products. The development time from idea to viable business is often less than one year. For rapidly deployed ventures, the toughest part of the survival stage may be the first few months of operation. Within the first year, rapid growth may occur; mature-firm financing issues can arise before they would have traditionally been expected. Such rapid maturity, in addition to being a challenge in itself, represents a tremendous challenge for entrepreneurial team members. They must deploy a variety of financial skills within the first year.

LIFE CYCLE STAGES AND THE ENTREPRENEURIAL PROCESS

Figure 1.4 displays connections between life cycle stages and the activities of the entrepreneurial process. The development stage in a venture's life cycle coincides with the developing opportunities component in the entrepreneurial process. The startup stage in the life cycle aligns with gathering resources in the entrepreneurial process.

As successful ventures continue to operate through their life cycles, ventures often must safely negotiate a survival stage. This is a time of continued gathering of resources, as well as focused management and growth of the venture's operations. The rapid-growth and early-maturity stages of the successful venture are associated with the management and growth of operations component in the entrepreneurial process.

Figure 1.4 Life Cycle Aspects of the Entrepreneurial Process and Value Creation

LIFE CYCLE STAGE	LIFE CYCLE ENTREPRENEURIAL PROCESS ACTIVITIES
Development stage	Developing opportunities
Startup stage	Gathering resources
Survival stage	Gathering resources, managing and building operations
Rapid-growth stage	Managing and building operations
Early-maturity stage	Managing and building operations

CONCEPT CHECK ► What are the five stages of a successful venture's life cycle?

SECTION **1.7**

Financing Through the Venture Life Cycle

Early-stage ventures often are undercapitalized from the beginning. This condition makes it essential that the entrepreneur understand, and attempt to tap, the various sources of financial capital as the venture progresses from development to startup and on through its survival stage. Once a venture is able to achieve a successful operating history, it becomes a seasoned firm; new sources (and larger amounts) of financial capital become attainable.

Figure 1.5 depicts the likely types of financing sources as well as the major players or providers of financial funds at each life cycle stage. Major types of financing include:

- Seed financing
- Startup financing
- First-round financing
- Second-round, mezzanine, and liquidity-stage financing
- Seasoned financing

Figure 1.5 Types and Sources of Financing by Life Cycle Stage

1. VENTURE FINANCING

LIFE CYCLE STAGE	TYPES OF FINANCING	MAJOR SOURCES/PLAYERS
Development stage	Seed financing	Entrepreneur's assets
		Family and friends
Startup stage	Startup financing	Entrepreneur's assets
		Family and friends
		Business angels
		Venture capitalists
Survival stage	First-round financing	Business operations
		Venture capitalists
		Suppliers and customers
		Government assistance programs
		Commercial banks
Rapid-growth stage	Second-round financing	Business operations
	Mezzanine financing	Suppliers and customers
	Liquidity-stage financing	Commercial banks
		Investment bankers

2. SEASONED FINANCING

LIFE CYCLE STAGE	TYPES OF FINANCING	MAJOR SOURCES/PLAYERS
Early-maturity stage	Obtaining bank loans	Business operations
	Issuing bonds	Commercial banks
	Issuing stock	Investment bankers

SEED FINANCING

seed financing

funds needed to determine whether an idea can be converted into a viable business opportunity

During the development stage of a venture's life cycle, the primary source of funds is in the form of **seed financing** to determine whether the idea can be converted into a viable business opportunity. The primary source of funds at the development stage is the entrepreneur's own assets. As a supplement to this limited source, most new ventures will also resort to *financial bootstrapping*, that is, creative methods, including barter, to minimize the cash needed to fund the venture. Money from personal bank accounts and proceeds from selling other investments are likely sources of seed financing. It is quite common for founders to sell personal assets (e.g., an automobile or a home) or secure a loan by pledging these assets as collateral. The willingness to reduce one's standard of living by cutting expenditures helps alleviate the need for formal financing in the development-stage venture. Although it can be risky, entrepreneurs often use personal credit cards to help finance their businesses. Family members and friends also provide an important secondary source of seed financing; they may make loans to the entrepreneur or purchase an equity position in the business. (It is often said that family and friends invest in the entrepreneur rather than in a product or service.) Such financing is usually relatively inexpensive, at least compared with more formal venture investing. While there are a few professional and business angel investors (see below) that engage in seed-stage investing, they are not a typical source of financing at this stage.

STARTUP FINANCING

startup financing

funds needed to take a venture from having established a viable business opportunity to initial production and sales

Startup financing coincides with the startup stage of the venture's life cycle; this is financing that takes the venture from a viable business opportunity to the point of initial production and sales. Startup financing is usually targeted at firms that have assembled a solid management team, developed a business model and plan, and are beginning to generate revenues. Depending on the demands placed on the entrepreneur's personal capital during the seed stage, the entrepreneur's remaining assets, if any, may serve as a source of startup financing. Family and friends may continue to provide financing during startup. However, the startup venture should begin to think about the advantages of approaching other, more formal, venture investors.

venture capital

early-stage financial capital often involving substantial risk of total loss

business angels

wealthy individuals operating as informal or private investors who provide venture financing for small businesses

Although sales or revenues begin during the startup stage, the use of financial capital is generally much larger than the inflow of cash. Thus, most startup-stage ventures need external equity financing. This source of equity capital is referred to as **venture capital**, which is early-stage financial capital that often involves a substantial risk of total loss.[26] The flip side of this risk of total loss is the potential for extraordinarily high returns when an entrepreneurial venture is extremely successful. Venture capital investors will require the venture, if it has not yet done so, to organize formally to limit the risk assumed by venture investors to the amount invested.[27]

Two primary sources of formal external venture capital for startup-stage ventures, as indicated in Figure 1.5, are business angels and venture capitalists. **Business angels** are wealthy individuals, operating as informal or private investors, who

26 Venture capital sometimes has a debt component. That is, debt convertible into common stock, or straight debt accompanied by an equity kicker such as warrants, is sometimes purchased by venture investors. We will discuss hybrid financing instruments in Chapter 14.

27 The legal forms for organizing small businesses are discussed in Chapter 3.

provide venture financing for small businesses. They may invest individually or in joint efforts with others.[28] While business angels may be considered informal investors, they are not uninformed investors. Many business angels are self-made entrepreneur multimillionaires, generally well educated, who have substantial business and financial experience. Business angels typically invest in technologies, products, and services in which they have a personal interest and previous experience.

venture capitalists (VCs)
individuals who join in formal, organized firms to raise and distribute venture capital to new and fast-growing ventures

Venture capitalists (VCs) are individuals who join in formal, organized **venture capital firms** to raise and distribute capital to new and fast-growing ventures. Venture capital firms typically invest the capital they raise in several different ventures in an effort to reduce the risk of total loss of their invested capital.[29]

venture capital firms
firms formed to raise and distribute venture capital to new and fast-growing ventures

FIRST-ROUND FINANCING

The survival stage of a venture's life cycle is critical to whether the venture will succeed and create value or be closed and liquidated. **First-round financing** is external equity financing, typically provided by venture investors during the venture's survival stage to cover the cash shortfalls when expenses and investments exceed revenues. While some revenues begin during the startup stage, the race for market share generally results in a cash deficit. Financing is needed to cover the marketing expenditures and organizational investments required to bring the firm to full operation in the venture's commercial market. Depending on the nature of the business, the need for first-round financing may actually occur near the end of the startup stage.

first-round financing
equity funds provided during the survival stage to cover the cash shortfall when expenses and investments exceed revenues

As Figure 1.5 suggests, survival-stage ventures seek financing from a variety of external sources. For example, both suppliers and customers become important potential sources of financing. Ventures usually find it advantageous, and possibly necessary, to ask their suppliers for **trade credit**, allowing the venture to pay for purchases on a delayed basis. Having more time to pay supplier bills reduces the need for other sources of financial capital. Upstream users of the firm's goods and services also may be willing to provide formal capital or advances against future revenues. Of course, delayed payments to creditors and accelerated receipts from customers, while good for current cash flow, do impose a need for more careful financial planning.

trade credit
financing provided by suppliers in the form of delayed payments due on purchases made by the venture

Federal and some state and local governments provide some financing to small ventures during their survival stages. For example, the SBA was established in 1953 by the federal government to provide financial assistance to small businesses. Many state and local governments have developed special **government assistance programs** designed to improve local economic conditions and to create jobs. These programs typically offer low-interest-rate loans and guarantee loans and may also involve tax incentives. Chapter 13 discusses such programs in greater detail.

government assistance programs
financial support, such as low-interest-rate loans and tax incentives, provided by state and local governments to help small businesses

Commercial banks, usually just called banks, are financial intermediaries that take deposits and make business and personal loans. Because commercial bankers prefer lending to established firms with two years of financial statements, it can be

commercial banks
financial intermediaries that take deposits and make business and personal loans

28 For descriptive information on the angels market, see William Wetzel, "The Informal Venture Capital Markets: Aspects of Scale and Market Efficiency," *Journal of Business Venturing* 2 (Fall 1987): pp. 299–313. An interesting study of how earliest-stage technology ventures are financed is presented in William Wetzel and John Freear, "Who Bankrolls High-Tech Entrepreneurs?" *Journal of Business Venturing* 5 (March 1980): pp. 77–89.

29 It has become common practice to use the terms "venture capitalists" (or VCs) and "venture capital firms" interchangeably. Chapter 12 provides a detailed discussion of the characteristics, methods, and procedures involved in raising professional venture capital.

difficult for survival-stage ventures to secure bank financing.[30] Thus, while we show commercial banks as a possible source of financing during the survival stage, successful ventures will typically find it much easier to obtain bank loans during their rapid-growth and maturity stages.

SECOND-ROUND FINANCING

Figure 1.5 indicates that the major sources of financing during the rapid-growth stage come from business operations, suppliers and customers, commercial banks, and financing intermediated by investment bankers. Most ventures, upon reaching the rapid revenue growth stage, find that operating flows, while helpful, remain inadequate to finance the desired rate of growth. Rapid growth in revenues typically involves a prerequisite rapid growth in inventories and accounts receivable, which requires significant external funding. Because inventory expenses are usually paid prior to collecting on the sales related to those inventories, most firms commit sizable resources to investing in "working capital." With potentially large and fluctuating investments in receivables and inventories, it is more important than ever that the venture formally project its cash needs. **Second-round financing** typically takes the form of venture capital needed to back working capital expansion.[31]

second-round financing

financing for ventures in their rapid-growth stage to support investments in working capital

MEZZANINE FINANCING

One study suggests that, on average, it takes two and one-half years to achieve operating breakeven (i.e., where revenues from operating the business become large enough to equal the operating costs), and a little more than six years to recover an initial equity investment.[32] Thus, the typical successful venture is usually well into its rapid-growth stage before it breaks even. As the venture continues to grow after breaking even, it may need another infusion of financial capital from venture investors. During a venture's rapid-growth stage, **mezzanine financing** provides funds for plant expansion, marketing expenditures, working capital, and product or service improvements. Mezzanine financing is usually obtained through debt that often includes an equity "kicker" or "sweetener" in the form of **warrants**—rights or options to purchase the venture's stock at a specific price within a set time period. At the end of the mezzanine stage, the successful firm will be close to leaving the traditional domain of venture investing and will be prepared to attract funding from the public and large private markets.

mezzanine financing

funds for plant expansion, marketing expenditures, working capital, and product or service improvements

warrants

rights or options to purchase a venture's stock at a specific price within a specified time period

LIQUIDITY-STAGE FINANCING

The rapid-growth stage of a successful venture's life cycle typically provides venture investors with an opportunity to cash in on the return associated with their risk; it also provides access to the public or private capital necessary to continue the firm's mission. A venture, if organized as a corporation, may desire to provide venture investor liquidity by establishing a public market for its equity. Temporary or

30 Survival- and even startup-stage ventures that might not be able to obtain direct loans from banks often can get indirect loans in the form of cash advances on credit cards issued by banks.

31 Depending on the size of financial capital needs, ventures may go through several rounds of financing (e.g., first, second, third, fourth, etc.). Sometimes the various rounds of financing are referred to as "series," such as Series A, Series B, Series C, Series D, and so on.

32 Cited in Timmons and Spinelli, *New Venture Creation,* 8th ed., pp. 426–427. See also Spinelli and Adams, *New Venture Creation,* 10th ed.

bridge financing may be used to permit a restructuring of current ownership and to fill the gap leading to the firm's first public offer of its equity in its **initial public offering (IPO)**. Typically, part of the proceeds of the public offering will be used to repay the bridge loan needed to keep the venture afloat until the offering. After (and sometimes during) an IPO, firms may directly sell founder and venture investor shares to the public market in a **secondary stock offering** of previously owned shares.

Firms not seeking a public market for their equity may attempt to slow to a growth rate that can be supported by internal funding, bank debt, and private equity. For such firms, investor liquidity may be achieved by the repurchase of investor shares, the payment of large dividends, or the sale of the venture to an acquirer. Existing and potential investors usually have strong preferences regarding the planned liquidity event. An investor's perception of the firm's willingness to provide venture investor liquidity affects the terms and conditions in all venture-financing rounds.

Investment banking firms advise and assist corporations regarding the structure, timing, and costs of issuing new securities. **Investment banker** is a broad term usually referring to an individual who advises and assists corporations in their security financing decisions. Investment bankers are particularly adroit at helping the successful venture firm undertake an IPO. Although it is more common for a firm to have an IPO during a time of rapid and profitable growth, it has become increasingly acceptable for firms with access to new ideas or technologies to go public with little or no operating history and before profitability has been established. Investment bankers also facilitate the sale of firms through their mergers and acquisitions divisions.

Venture law firms specialize in providing legal services to young, fast-growing entrepreneurial firms. They can craft a firm's legal structure, its tax and licensing obligations, its intellectual property strategy, its employment agreements and incentive compensation, as well as the actual wording and structure of the securities it sells to others. An early and solid relationship with a law firm that specializes in the legal issues of new ventures can be a considerable asset as the firm grows and continues to seek financing.

bridge financing
temporary financing needed to keep the venture afloat until the next offering

initial public offering (IPO)
a corporation's first sale of common stock to the investing public

secondary stock offering
founder and venture investor shares sold to the public

investment banking firms
firms that advise and assist corporations regarding the type, timing, and costs of issuing new securities

investment banker
individual working for an investment banking firm who advises and assists corporations in their security financing decisions and regarding mergers and acquisitions

venture law firms
law firms specializing in providing legal services to young, fast-growing entrepreneurial firms

SEASONED FINANCING

Seasoned financing takes place during the venture's early-maturity stage. As previously noted, venture investors typically complete their involvement with a successful venture before the venture's move into the early-maturity stage of its life cycle. Retained earnings from business operations are a major source of financing for the mature venture. If additional funds are needed, seasoned financing can be obtained in the form of loans from commercial banks or through new issues of bonds and stocks, usually with the aid of investment bankers. A mature firm with previously issued publicly traded securities can obtain debt and equity capital by selling additional securities through **seasoned securities offerings** to the public.

As a mature firm's growth rate declines to the growth rate for the whole economy, the firm's need for new external capital is not the matter of survival that it was in earlier stages. Mature firms frequently approach financing as a way to cut taxes, fine-tune investor returns, and provide capital for mergers, acquisitions, and extraordinary expansion. If they have created brand equity in their securities, they may choose to fund mergers and acquisitions by directly issuing securities to their

seasoned securities offering
the offering of securities by a firm that has previously offered the same or substantially similar securities

targets. Mature private companies can sell seasoned versions of their securities directly to a restricted number and class of investors, but not to the general public. The time needed for an entrepreneurial firm to reach its early-maturity stage depends on its operating characteristics, the rate of technological change in the industry, and the drive, vision, talent, and depth of resources in its management team and venture investors.

CONCEPT CHECK

- What types of venture financing are typically available at each stage of a successful venture's life cycle?
- What is seasoned financing?

SECTION 1.8

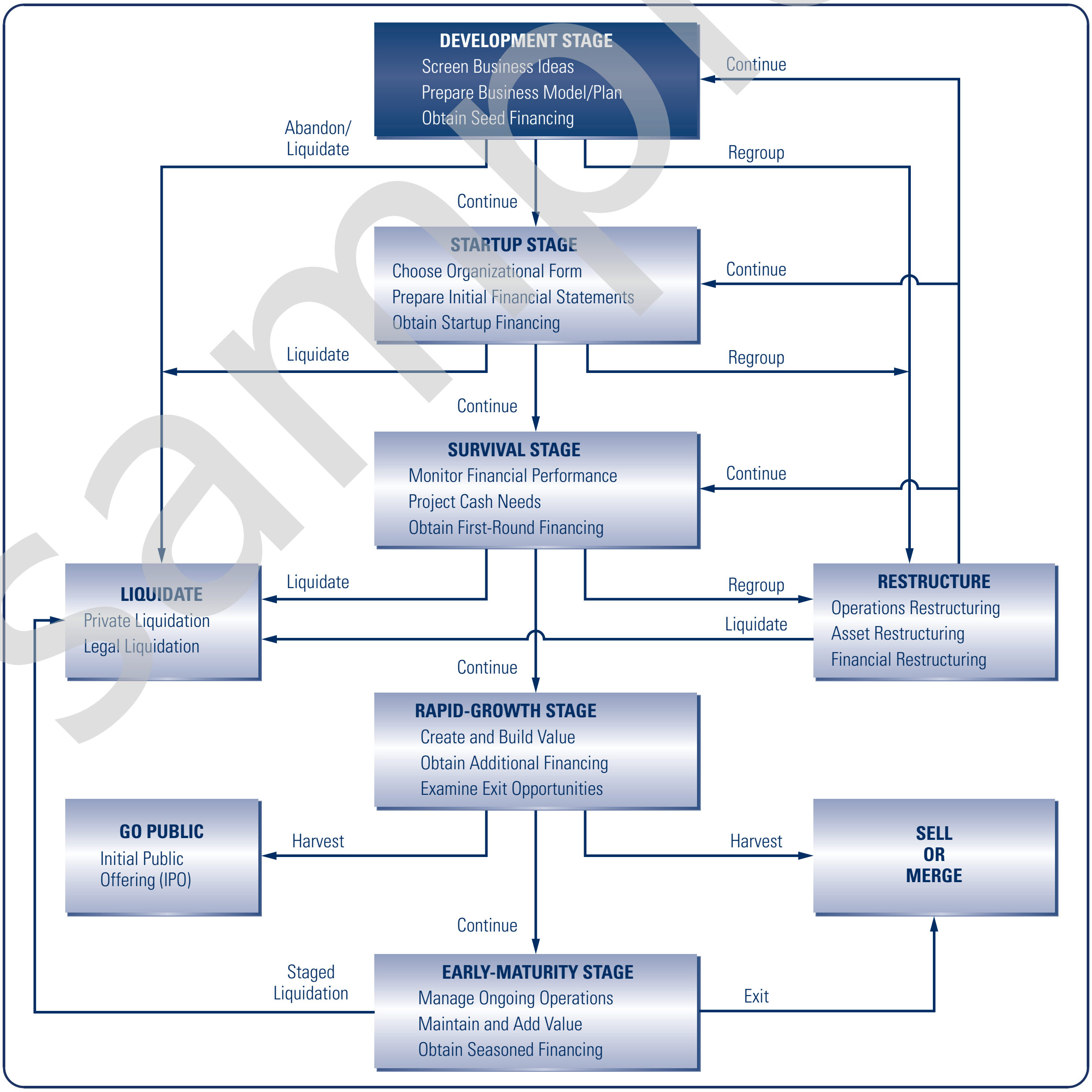
Life Cycle Approach for Teaching Entrepreneurial Finance

We use a life cycle approach throughout this text to teach entrepreneurial finance. Figure 1.6 provides an overview of major operating and financial decisions faced by entrepreneurs as they manage their ventures during the five life cycle stages. The fact that the entrepreneur is continually creating useful information about the venture's viability and opportunities means that this approach, and the diagram depicted in Figure 1.5, should be considered as dynamic and ongoing. At each stage, and sometimes more than once during a stage, the entrepreneur must make critical decisions about the future of the venture. Should we abandon the idea or liquidate the venture? Should we rethink the idea, redesign a product or service, change manufacturing, selling, or distributing practices, or restructure the venture? Ultimately, the question becomes "Should we continue?"[33]

This text is divided into six parts. Part 1, "The Entrepreneurial Environment," consists of the first two chapters and focuses primarily on development-stage financial considerations faced by entrepreneurs. During the development stage, the entrepreneur screens or examines an idea from the perspective of whether it is likely to become a viable business opportunity, develops a business model for the idea that successfully passes the "opportunity screen," prepares a business plan, and obtains the seed financing necessary to carry out the venture's development stage. Earlier in this chapter, we provided a brief discussion of the sources of, and players involved in, seed financing. Sources of financing during the other life cycle stages also were presented. In Chapter 2, we introduce the ingredients of a sound business model that are necessary to convert an idea into a viable business opportunity. We also provide examples of qualitative and quantitative assessment exercises that can be used to help assess the viability of a business idea. The last part of the chapter discusses the key elements of a business plan.

33 While the entrepreneur may have the most at stake when making these decisions, investors (i.e., friends, family, and/or venture investors) and other constituencies (e.g., creditors, the management team, and other employees) will be affected by what the entrepreneur decides. Thus, we choose to use "we" instead of "I" when formulating these questions.

Figure 1.6 Life Cycle Approach: Venture Operating and Financial Decisions



Part 2, "Organizing and Operating the Venture," consists of Chapters 3, 4, and 5 and focuses on entrepreneurial finance topics relating primarily to the startup and survival life cycle stages as depicted in Figure 1.6. The preparation of a business plan serves as a link between the development stage and the startup stage. To start operating the business, the entrepreneur must first decide on the organizational form for the business, prepare pro forma or projected financial statements for the first several years of operation, and identify the amount and timing of startup financing that will be needed. Many entrepreneurs find that it is relatively easy to start a new venture; the hard part is surviving the first year or two of operation. To progress successfully through the survival stage, the entrepreneur must closely monitor the venture's financial performance, understand and project cash needs, and obtain first-round financing.

In Chapter 3, we discuss the various forms of business organizations available to the entrepreneur, provide a discussion of the importance of developing intellectual property and ways to protect intellectual property, and discuss sources of early-stage financing needed during the startup and survival stages. In Chapter 4, we review the financial statements used to measure a venture's financial performance. Chapter 5 covers the evaluation of operating and financial performance. It is worth noting that users of this text who have adequate finance/accounting backgrounds can bypass Chapters 4 and 5 without loss of continuity, as long as they have a fundamental understanding of cash flow concepts, including how ventures build and burn cash.

Part 3, "Planning for the Future," consists of Chapters 6, 7, and 8; it provides a transition from a venture's survival to its ability to experience rapid sales growth and the creation and growth of value. Again, we turn to the venture life cycle illustration in Figure 1.6. As a venture starts operating, short-term plans must be prepared, monitored, and revised to adjust to actual performance and competitive pressures. Survival depends on generating sufficient cash flow to meet obligations as they come due in the short run, which makes it necessary for the venture to prepare monthly financial projections for the next year. Chapter 6 focuses on managing cash flow.

Being able to move successfully from survival to rapid growth usually requires finding ways to generate several types and rounds of financing. Chapter 7 discusses the types and costs of financial capital available to the entrepreneur. Because the cost of financial capital also can be viewed as the rate of return required on a specific risk class of investment, the materials in this chapter are important to understanding how ventures are valued. Chapter 8 provides an introduction to securities law basics. Before the entrepreneur starts raising financial capital, it is important that she understands which actions are legal and which actions are illegal. Ignorance of the law is not an acceptable defense when issuing or selling securities.

Part 4, "Creating and Recognizing Venture Value," consists of Chapters 9, 10, and 11. Long-term financial planning, the topic of Chapter 9, requires the projection of annual financial statements covering the next few years. Financial statement projections should reflect a venture's survival stage as well as what is expected for the venture as it succeeds and begins to grow rapidly. Of course, only those ventures that are able to survive by regrouping and restructuring will succeed in reaching their rapid-growth stages. As previously noted, the financial goal of the entrepreneurial venture is to maximize the value of the venture to the owners. Most of a venture's value is achieved in the form of free cash flows generated during the latter part of the venture's rapid-growth stage and during the maturity stage (see Figure 1.6). To increase revenues rapidly, investments in inventories and fixed assets are necessary. Generally, these assets require additional financing. Once the assets are in place, however, the successful venture begins generating large and growing amounts of free cash flows. Chapter 10 discusses the fundamentals of financial valuation and covers the equity perspective of valuation. We present two methods for valuing a venture's equity: the maximum dividend method and the pseudo dividend method. Chapter 11 examines common venture investor shortcut methods for valuing the venture and relates them to the more detailed valuation methods introduced in Chapter 10.

Part 5, "Structuring Financing for the Growing Venture," consists of Chapters 12, 13, and 14. As entrepreneurial ventures move successfully through succeeding stages of their life cycles, financing sources often become more varied and, in some cases, more complex. Most entrepreneurial ventures will seek financial capital from venture investors during their progress from startup, through survival, and into the rapid-growth stage of their lifetime. Chapter 12 discusses the history of, and current practices used by, professional VCs. Other intermediated financing is the topic of Chapter 13. In Chapter 14, we discuss security design, including issuing various classes of stock, debt that is convertible into common stock, and warrants. We also illustrate how ventures are valued from an enterprise perspective, which is the value of the venture to both debt holders and equity investors.

Part 6, "Exit and Turnaround Strategies," consists of Chapters 15 and 16. As depicted in Figure 1.6, it is during a venture's rapid-growth stage that entrepreneurs and outside venture investors examine possible exit opportunities to "harvest" the value they built. Chapter 15 examines alternative exit opportunities that include going public through an IPO, selling the venture to management or outside investors, and merging the venture with another firm.

Chapter 16 recognizes that, at one or more times during a venture's life cycle, financial distress may develop whereby a venture is unable to meet its debt obligations when they are due. Such a situation creates a need to regroup, reorganize, and even restructure to move the venture forward toward success. Restructuring may take the form of operations restructuring, asset restructuring, and/or financial restructuring. Sometimes it is necessary to seek legal protection while financial restructuring takes place. At the extreme, unsuccessful restructuring efforts may result in liquidation.

Now that we have introduced you to the world of entrepreneurial finance, we hope you apply yourself to learn the concepts, theory, and practice of finance as they relate to the entrepreneur. We remind you that mastering the materials in this book, while satisfying in itself, is intended for the purpose of creating financial competence that increases the likelihood your entrepreneurial firm will survive, attract financial backing, and create value over time.

CONCEPT CHECK

- Why do many entrepreneurial ventures have to regroup and restructure?
- How can the entrepreneur exit or harvest the venture?

Summary

This chapter provided an introduction to the world of entrepreneurial finance. We began by describing the entrepreneurial process. We also defined entrepreneurship and discussed the importance of small and growing ventures in the U.S. economy. We recognized that starting and successfully operating an entrepreneurial venture is not easy. At the same time, there is always room for one more successful entrepreneur.

We discussed the importance of understanding societal, demographic, and technological trends shaping our society and providing many lucrative entrepreneurial opportunities. Our attention then shifted to identifying and discussing the seven principles of entrepreneurial finance:

1. Real, human, and financial capital must be rented from owners.

2. Risk and expected reward go hand in hand.
3. While accounting is the language of business, cash is the currency.
4. New venture financing involves search, negotiation, and privacy.
5. A venture's financial objective is to increase value.
6. It is dangerous to assume that people act against their own self-interests.
7. Venture character and reputation can be assets or liabilities.

The financial objective is to increase the venture's value. Behaving fairly and honestly with the venture's constituencies builds confidence and support for the entrepreneur and the venture, which contributes to increasing the venture's value. Increasing value can be consistent with social responsibility, and many wealthy entrepreneurs have engaged in personal and venture philanthropy.

Conflicts may arise when incentives diverge as the new venture matures. While entrepreneurial ventures often can avoid or minimize the owner–manager agency problem, the owner–debt holder conflict will arise every time the venture faces financial distress. After discussing the principles of entrepreneurial finance, we turned our attention to defining entrepreneurial finance and described the responsibilities of a venture's financial manager.

We then identified and presented a five-stage life cycle that successful ventures typically endure. These stages are the development stage, the startup stage, the survival stage, the rapid-growth stage, and the early-maturity stage. Next, we discussed types of financing and the sources and players involved at the various life cycle stages. Types of venture financing include seed financing, startup financing, first-round financing, second-round financing, and mezzanine financing. Liquidity-stage financing is important in allowing venture investors to achieve a tangible return through the sale of the venture or its securities. For ventures achieving their maturity stages, seasoned financing in the form of bank loans, bonds, and stocks is available to meet possible external financing needs.

We concluded the chapter with the presentation of our life cycle approach. We connected each chapter to the life cycle stages and topics they address, from initial idea screening in Chapter 2 through the execution of exit strategies in Chapter 15. Chapter 16 provides guidance to the many entrepreneurial ventures that will suffer some form of financial distress. If these ventures are to survive and build value, they will need to successfully regroup, reorganize, and restructure.

Key Terms

bridge financing
business angels
commercial banks
development stage
disruptive innovation
e-commerce
early-maturity stage
early-stage ventures
entrepreneur
entrepreneurial finance
entrepreneurial opportunities
entrepreneurial process
entrepreneurship
financial distress
first-round financing
free cash
free cash flow
government assistance programs
initial public offering (IPO)
innovation
investment banker
investment banking firms
mezzanine financing
owner–debt holder conflict
owner–manager (agency) conflicts
private financial markets
public financial markets
rapid-growth stage
seasoned firms
seasoned securities offering
second-round financing
secondary stock offering
seed financing
Small Business Administration (SBA)
startup financing
startup stage
survival stage
trade credit
venture capital
venture capital firms
venture capitalists (VCs)
venture law firms
venture life cycle
warrants

Discussion Questions

1. What is the entrepreneurial process?
2. What is entrepreneurship? What are some basic characteristics of entrepreneurs?
3. Why do businesses close or cease operating? What are the primary reasons why businesses fail?
4. What are five megatrend sources or categories for finding entrepreneurial opportunities?
5. What asset and financial bubbles have occurred recently? How can bubbles and financial crises lead to entrepreneurial opportunities?
6. What is e-commerce? Why are the Internet economy and e-commerce here to stay?
7. What is meant by disruptive innovation? What is the "sharing economy" societal trend?
8. Identify the seven principles of entrepreneurial finance.
9. Explain the statement: "The time value of money is not the only cost involved in renting someone's financial capital."
10. How do public and private financial markets differ?
11. What is the financial goal of the entrepreneurial venture? What are the major components for estimating value?
12. From an agency relationship standpoint, describe the possible types of problems or conflicts of interest that could inhibit maximizing a venture's value.
13. Briefly discuss the likely importance of an entrepreneur's character and reputation in the success of a venture. What role does social responsibility play in the operation of an entrepreneurial venture?
14. What is entrepreneurial finance? What are the responsibilities of the financial manager of an entrepreneurial venture?
15. What are the five stages in the life cycle of a successful venture?
16. New ventures are subject to periodic introspection as to whether they should continue or liquidate. Explain the types of information you would expect to gather and how they would be used in each stage to aid an entrepreneur's approach to the venture's future.
17. Identify the types of financing that typically coincide with each stage of a successful venture's life cycle.
18. Identify the major sources, as well as the players, associated with each type of financing for each life cycle stage.
19. Describe the life cycle approach for teaching entrepreneurial finance.
20. From the Headlines—Ice Energy: Briefly describe the "ice battery" market and how Ice Energy's Ice Bear system addresses that market. Give some examples of how Ice Energy can expand its market and tap additional sources of capital.

Internet Activities

1. Web-surfing exercise: Develop your own list of the five most important societal or economic trends currently shaping our society and providing major business opportunities. Use the Web to generate potential venture ideas related to the trends and to gather commentary and statistics on them.
2. Determine several "resources" available from the Small Business Administration (SBA) for entrepreneurs that might be useful in starting, financing, and managing an entrepreneurial venture. The SBA Web site is http://www.sba.gov. Also, search the SBA's Office of Advocacy Web site (http://www.sba.gov/advo/) for information relating to recent annual numbers of employer firm births and the importance of small businesses to the U.S. economy.
3. Following are some pairs of famous entrepreneurs. Using the Web if needed, associate the entrepreneurs with the companies they founded:

1. Steve Jobs and Steven Wozniak	A. Google
2. Bill Gates and Paul Allen	B. Ben & Jerry's
3. Larry Page and Sergey Brin	C. Microsoft
4. Ben Cohen and Jerry Greenfield	D. Apple, Inc.

4. Search the Web for recent developments on the part of Airbnb and Uber to disrupt the lodging and taxi industries, respectively. Also search the Web and attempt to identify other possible innovations that may be disrupting existing markets and networks.

► Exercises/Problems

1. [*Financing Concepts*] The following ventures are at different stages in their life cycles. Identify the likely stage for each venture and describe the type of financing each venture is likely to be seeking and identify potential sources for that financing.
   A. Phil Young, founder of Pedal Pushers, has an idea for a pedal replacement for children's bicycles. The Pedal Pusher will replace existing bicycle pedals with an easy-release stirrup to help smaller children hold their feet on the pedals. The Pedal Pusher will also glow in the dark and will provide a musical sound as the bicycle is pedaled. Phil is seeking some financial help in developing working prototypes.
   B. Petal Providers is a firm that is trying to model the U.S. floral industry after its European counterparts. European flower markets tend to have larger selections at lower prices. Revenues started at $1 million last year when the first "mega" Petal Providers floral outlet was opened. Revenues are expected to be $3 million this year and $15 million next year after two additional stores are opened.
2. [*Life Cycle Financing*] The following ventures have supplied information on how they are being financed. Link the type and sources of financing to where each venture is likely to be in its life cycle.
   A. Voice River provides media-on-demand services via the Internet. Voice River raised $500,000 of founder's capital in April 2016 and "seed" financing of $1 million in September 2016 from the Sentinak Fund. The firm is currently seeking $6 million for a growth round of financing.
   B. Electronic Publishing raised $200,000 from three private investors and another $200,000 from SOFTLEND Holdings. The financial capital is to be used to complete software development of e-mail delivery and subscription management services.
3. [*Venture Financing*] Identify a successful entrepreneurial venture that has been in business at least three years.
   A. Use historical revenue information to examine how this particular venture moved through its life cycle stages. Determine the length of the development stage, the startup stage, and so forth.
   B. Determine the financing sources used during the various stages of the venture's life cycle.
   C. Identify the venture's equity owners and how shares have been distributed among the owners. What portion of ownership has been allocated to management team members? What, if any, agency conflicts can you identify?
4. [*Financial Risk and Return Considerations*] Explain how you would choose between the following situations. Develop your answers from the perspective of the principles of entrepreneurial finance presented earlier in the chapter. You may arrive at your answers with or without making actual calculations.
   A. You have $1,000 to invest for one year. (This would be a luxury for most entrepreneurs.) You can set a 4 percent interest rate for one year at the Third First Bank or a 5 percent interest rate at the First Fourth Bank. Which savings account investment would you choose, and why?
   B. A "friend" of yours will lend you $10,000 for one year if you agree to repay him $1,000 interest plus returning the $10,000 investment. A second "friend" has only $5,000 to lend to you but wants total funds of $5,400 in repayment at the end of one year. Which loan would you choose, and why?
   C. You have the opportunity to invest $3,000 in one of two investments. The first investment would pay you either $2,700 or $3,300 at the end of one year, depending on the success of the venture. The second investment would pay you either $2,000 or $4,000 at the end of one year, depending on the success of the venture. Which investment would you choose, and why? Would your answer change if your investment were only $1?
   D. An outside venture investor is considering investing $100,000 in either your new venture or another venture, or investing $50,000 in each venture. At the end of one year, the value of your venture might be either $0 or $1 million. The other venture is expected to be worth either $50,000 or $500,000 at the end of one year. Which investment choice (yours, the other venture, or half-and-half) do you think the venture investor would choose? Why?

5. [*Ethical Issues*] Assume that you have been working on a first-generation "prototype" for a new product. An angel investor is "waiting in the wings," wanting to invest in a second-generation model or prototype. Unfortunately, you have run out of money and aren't able to finish the initial prototype. The business angel has previously said that she would "walk" if you cannot produce a working first-generation prototype.
   A. What would you attempt to do to save your entrepreneurial venture?
   B. Now let's assume that the angel investor will advance you the financing needed for the second-generation prototype based on your "word" that the first-generation prototype has been completed and is working? What would you do?

► Supplemental Exercises/Problems

[Note: These activities are for readers who have an understanding of financial statements. Accountants record the flow of revenues and expenses over a time period such as a year in the income statement. Accountants also record the amount in asset accounts at the end of each accounting period in the balance sheet. For readers who need to review basic financial statements, the following problems can be completed after the materials in Chapter 4 have been covered.]

6. [*Costs or Expenses*] Phil Young, founder of Pedal Pushers, expects to spend the next six months developing and testing prototypes for a pedal replacement for children's bicycles. (See Part A of Problem 2 for a description of the proposed product.) Phil anticipates paying monthly rent of $700 for space in a local warehouse where the Pedal Pusher product will be designed, developed, and tested. Utility expenses for electricity and heat are estimated at $150 per month. Phil plans to pay himself a salary of $1,000 per month. Materials needed to build and test an initial prototype product are expected to cost $9,500. Each redesign and new prototype will require an additional $4,500 investment. Phil anticipates that, before the final Pedal Pusher is ready for market at the end of six months, three prototypes will have been built and tested. Costs associated with test marketing the Pedal Pusher are estimated at $7,000.
   A. Determine the amount of financial capital that Phil Young will need during the six months it will take to develop and test-market the Pedal Pusher.
   B. What type of financial capital is needed? What are the likely sources of that capital for Phil Young?
   C. What would be your estimate of the amount of financial capital needed if the product development period lasted nine months?
   D. What compensation arrangements would you recommend as he hires additional members of the management team?
7. [*Expenses and Revenues*] Let's assume that Phil Young does develop and successfully market the Pedal Pusher product discussed in Problems 1 and 6. Phil's venture will purchase materials for making the product from others, assemble the products at the Pedal Pusher venture's facilities, and hire product sales representatives to sell the Pedal Pusher through local retail and discount stores that sell children's bicycles. The costs of plastic pedals and extensions; bolts, washers, and nuts; reflective material; and a microchip to provide the music when the bicycle is pedaled are expected to be $2.33 per pair of Pedal Pushers. Assembly costs are projected at $1.50 per pair. Shipping and delivery costs are estimated at $0.20 per pair, and Phil Young will have to pay commissions of $0.30 per pair of pedals sold by the sales representatives.
   A. What will it cost to produce and sell a pair of Pedal Pushers?
   B. What price will Phil Young have to charge for a pair of Pedal Pushers if he wants a "markup" of 50 percent on each sale? At what price would retailers have to sell a pair of Pedal Pushers if they, in turn, desired a "markup" before their expenses of 40 percent?
   C. Now that Pedal Pushers is up and operating, Phil Young feels he should be paid a salary of $5,000 per month. Other administrative expenses will be $2,500 per month. How many units (pairs) of Pedal Pushers will the venture have to sell to cover all operating and administrative costs during the first year of operation?

MINICASE

Interact Systems, Inc.

Interact Systems, Inc., has developed software tools that help hotel chains solve application integration problems. Interact's application integration server (AIS) provides a two-way interface between central reservations systems (CRS) and property management systems (PMS). At least two important trends in the hotel industry are relevant. First, hotels are shifting from manual to electronic booking of room reservations; electronic bookings will continue to increase as more reservations are made over the Internet. Second, competitive pressures are forcing hotels to implement yield management programs and to increase customer service. By integrating the CRS and PMS through Interact's AIS, inventories can be better managed, yields improved, and customer service enhanced.

All reservation traffic is routed from the CRS to individual hotel properties. This allows Interact Systems to create a database that can be used to track customers and to facilitate marketing programs, such as frequent-stay or VIP programs, as a way of increasing customer satisfaction. Interact forecasts application integration expenditures in the hospitality industry exceeding $1 billion by 2019.

Greg Thomas founded Interact Systems in 2013 and developed the firm's middleware software and hospitality applications. He has twelve years of systems applications experience and currently is Interact's chief technology officer. Eric Westskow joined Interact in early 2016 as president and CEO. He had worked in sales and marketing in the software industry for more than twenty years.

Interact Systems' AIS software development, which began in 2013, went through several design changes in 2014. The first product was sold and installed in 2015. Sales were only $500,000 in 2015. However, now that the firm has dependable market-tested AIS products ready to be shipped, revenues are expected to reach $20.8 million in 2019.

Greg Thomas founded Interact Systems with $50,000 of his own savings plus $50,000 from friends. Two private investors provided an additional $200,000 in 2014. In addition, $1 million was obtained from a venture capital firm, Katile Capital Partners, in early 2016 in exchange for an equity position in Interact. The firm currently is seeking an additional $5 million to finance sales growth.

A. Verify the two important trends that are developing in the hotel industry.
B. Describe how Interact Systems' AIS software products will benefit the hotel industry from a profitability standpoint.
C. Describe how Interact Systems' AIS software will help hotels improve customer satisfaction.
D. Describe the life cycle stages that Interact Systems has progressed through to date.
E. What types of venture financing have been obtained, or are being sought, by Interact?
F. Relate major sources or players with the venture financing described in Part E.
G. What types of agency problems or conflicts should the founding entrepreneur have anticipated?
H. What, if anything, should the founding entrepreneur have done in anticipation of agency conflicts?
I. Assuming the venture succeeds, what are the potential advantages to other stakeholders (customers, employees, and society more broadly)?
J. If internal sales growth projections are revised downward after the current financing round, what, if any, disclosure to stakeholders (investors, employees, customers, etc.) should occur? Why?

CHAPTER 2

Developing the Business Idea

PREVIOUSLY COVERED

In Chapter 1, we presented an overview of entrepreneurial finance and, we hope, kindled your interest in learning more about the financial management tools and methods that can help entrepreneurs succeed. We aligned the types of financing, sources, and investors with a successful venture's stages of revenue growth. We explained how the progression through this book follows the venture life cycle.

LOOKING AHEAD

Part 2 focuses on starting a new venture and surviving the first year or two of operations. Chapter 3 covers the pros and cons of alternative business organizations, including tax and liability considerations the entrepreneur should consider when making choices regarding a new venture's formal organization. We discuss important intellectual property rights issues that can factor heavily in whether the venture survives and prospers. We consider potential seed and startup financing sources.

CHAPTER LEARNING OBJECTIVES

In this chapter, we examine how one can move from an idea to an assessment of the related business opportunity's feasibility. We introduce both qualitative and quantitative tools to facilitate this assessment. We conclude the chapter with an overview of the more formal document that incorporates, extends, and reinforces the initial feasibility assessment's analysis: the business plan. After completing this chapter, you will be able to:

1. Describe the process of moving from an idea to a business model/plan.
2. Understand the components of a sound business model.
3. Identify some of the best practices for high-growth, high-performance firms.
4. Understand the importance of timing in venture success.
5. Describe the use of a Strength-Weakness-Opportunity-Threats (SWOT) analysis as an initial "litmus test."
6. Identify the types of questions that a reasonable feasibility assessment addresses.
7. Identify quantitative criteria that assist in assessing a new venture's feasibility and its ability to attract external financing.
8. Describe the primary components of a typical business plan.

FROM THE HEADLINES

Diluting the Angels' Share

By now, you've realized that many new ventures are funded by "angels" who, in return for a share of ownership, provide financing. While we might be tempted to coin that ownership as the "angels' share," there is a much longer history to the phrase in the distilled beverages industry. For many types of whiskey, barrel aging is required. For example, under U.S. law, "straight bourbon whiskey" must be aged for at least two years in new, charred oak containers.[1] U.K. law requires "Scotch" to be aged "for at least three years in wooden casks not exceeding 700 litres capacity."[2] Canadian whiskies must "be aged in small wood for not less than three years."[3] "Fine" Scotch can sit in a barrel for several decades and sell for thousands of dollars a bottle. A large crystal decanter of Macallan "M," a blend of seven sherry-casked whiskeys aged from 25 to 75 years, sold for $628,205 at a Sotheby's auction in Hong Kong in 2014.[4] All of this is well and good, but what about the angels' share?

Oak barrels breathe. Change in atmospheric pressure across the seasons causes the distillate to interact with the wood, imparting the distinctive flavors for which different whiskeys are known. That interaction has as a side effect the slow evaporation of the distillate, which is affectionately termed "the angels' share." Typically, the longer the distillate is aged, the higher the angels' share, and the higher the price for what remains (which is also usually alleged to be "smoother").

Distilling all of this detail was merely background for the entrepreneurial opportunity identified by Tom Lix and Cleveland Whiskey. Suppose one could find a way to interact distillate and wood over a shorter period of time in a controlled pressurized environment? The outcome could be much less evaporation and much faster "aging." Between diluting the angels' share evaporation and shortening the length of time between outlay and income (say, reducing the cash conversion cycle from ten years to seven or eight months) the opportunity could be a game changer.[5]

Starting with a $25,000 seed grant from a community college, followed by a $100,000 low interest rate loan, Cleveland Whiskey launched in 2013 with over $1 million from public, private, and business angel investors. It sold 50,000 bottles in the first ten months for over $1 million in revenue.[6] Business plan predictions of third-year revenue of $10 million and fifth-year revenue of $54 million seem quite reasonable given the launch success in the first ten months.[7] Reviews for the whiskey have been mixed, but Lix's classic entrepreneurship attitude is to "let the marketplace decide."[8] Sometimes, diluting the heavenly angels' shares benefits the earthly angels.[9]

1 http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=5ea7acdd54dff93dbce97e668013dfd8;rgn=div8;view=text;node=27%3A1.0.1.1.3.3.25.2;idno=27;cc=ecfr, viewed on 1/18/2016.

2 http://www.scotch-whisky.org.uk/media/12744/scotchwhiskyregguidance2009.pdf, viewed on 1/18/2016.

3 http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._870/section-B.02.020.html, viewed on 1/18/2016

4 http://money.cnn.com/2014/01/21/news/economy/whisky-auction/, viewed on 1/18/2016.

5 For connoisseurs and regulators, note that the bourbon that Cleveland whiskey sells after about 6 months and a week in a barrel is not "straight bourbon whiskey" but rather just "bourbon whiskey."

6 http://www.entrepreneur.com/article/233733, viewed on 1/18/2016.

7 http://www.inc.com/magazine/201306/john-grossman/whiskey-cleveland.html, viewed on 1/18/2016.

8 http://www.forbes.com/sites/alexknapp/2013/05/29/cleveland-whiskey-ages-bourbon-in-one-week/#2715e4857a0b46bb864572c3, viewed on 1/18/2016.

9 For an interesting and critically acclaimed movie on the topic, see the 88 percent "fresh" unrated U.K. film *The Angels' Share*, 2013, http://www.rottentomatoes.com/m/the_angels_share/, viewed on 1/18/2016.

Every new venture begins with an idea. Transforming the concept in one's mind into a product or service that satisfies, or creates and then satisfies, a consumer need is the first step in the entrepreneurial process. Only a small number of new business ideas become viable business opportunities with funded business plans. We know that venture capitalists invest in only 1 to 3 percent of business plans presented to them. To survive the massive winnowing, particularly when seeking professional venture capital, successful entrepreneurs overcome substantially long odds.

How do we know whether an idea has the potential to become a viable business opportunity? The answer is that we don't know with absolute certainly. There are many examples of good ideas that have flopped as business ventures. Likewise, there are many examples of ideas that were turned down by venture investors (and professors) before ultimately making the persistent entrepreneur a wealthy individual. While there is no infallible screening process, there are tools and techniques that can help you and prospective investors examine similarities between your potential venture and other successful ventures.

SECTION **2.1**

Process for Identifying Business Opportunities

In Chapter 1, we defined an *entrepreneur* as an individual who thinks, reasons, and acts to convert ideas into commercial opportunities and to create value. An entrepreneur may start a number of different types of businesses including:

- salary-replacement firms;
- lifestyle firms;
- entrepreneurial firms or ventures.

Salary-replacement firms provide their owners with income levels comparable to what they would have earned working for much larger firms. Examples include single-store retailers, restaurant owners, and financial and tax services providers. **Lifestyle firms** allow their owners to pursue specific lifestyles while being paid for doing what they like to do. Examples include owning and operating a ski instruction or whitewater rafting business.

Entrepreneurial ventures strive for high growth rates for revenue, profit, and cash flow. Typically, entrepreneurial ventures will not be able to grow at the targeted rate without attracting external investment above and beyond that provided by the entrepreneur and retained profits. Salary-replacement and lifestyle firms experience some of the trauma and rewards of the entrepreneurial lifestyle, but remain centered on a small-scale format with limited growth and employment opportunities. In the United States, small businesses are predominantly salary-replacement or lifestyle firms; many provide their owners with perceived business enjoyment and a reasonable amount of wealth.[1] For such firms, rapid growth and international market domination are of secondary, if any, interest to the owners. While we don't want to diminish the contribution of this very large and economically critical class of entrepreneurial firms, we do want to make it clear that our focus is on the subset of entrepreneurial firms seeking growth and market domination. Such firms experience traumatic growth pains and are the primary targets for professional venture investing. To emphasize the particular challenges faced by such firms, we will refer to our growth-driven subset as entrepreneurial ventures.

In Chapter 1, we defined *entrepreneurial opportunities* as ideas that have the potential to create value through new, repackaged, or repositioned products, markets, processes, or services. A well-designed entrepreneurial venture begins with an idea that survives an analysis of its feasibility and results in a business model/plan. Figure 2.1 depicts a graphical representation of moving from the idea or entrepreneurial opportunity stage through the feasibility analysis stage and into the business planning stage. Many introductory entrepreneurship textbooks spend considerable time on identifying ideas, conducting feasibility analyses, and preparing

salary-replacement firms
firms that provide their owners with income levels comparable to what they could have earned working for much larger firms

lifestyle firms
firms that allow owners to pursue specific lifestyles while being paid for doing what they like to do

entrepreneurial ventures
entrepreneurial firms that are cash flow–and performance-oriented as reflected in rapid value creation over time

1 For example, see Thomas J. Stanley and William D. Danko, *The Millionaire Next Door* (New York: Longstreet Press, 1996). Most introductory entrepreneurship textbooks also discuss the different types of business opportunities.

Figure 2.1 From Entrepreneurial Opportunities to New Businesses, Products, or Services

business plans.[2] Rather than repeating that material here, our objective is to provide insights into the process while maintaining an entrepreneurial finance perspective.

Once conceptualized, a new idea should be examined for its business feasibility. The second element in Figure 2.1 is an initial feasibility review. This review focuses on whether it is possible to convert the idea into a product or service meeting a lucrative unfilled need. Much insight can be gained from this initial feasibility "litmus test." Entrepreneurs pursuing a salary-replacement or lifestyle business requiring little outside financing may move rapidly from such a basic qualitative screen to preparing a business plan. However, for entrepreneurial ventures requiring external financing, a more rigorous feasibility analysis with qualitative and quantitative components offers important additional insights.

Later in this chapter, we will return to a simple initial approach and more detailed in-depth approaches to feasibility analysis. First, however, we want to discuss the basic ingredients of a sound business model. Knowing the best practices of successful startup businesses can help an entrepreneur make better judgments and distinctions when conducting a feasibility analysis or writing a business plan.

CONCEPT CHECK ► What are three types of startup firms?

SECTION **2.2**

To Be Successful, You Must Have a Sound Business Model

sound business model
a framework for generating revenues, making profits, and producing free cash flows

A good idea is not enough. If an entrepreneur hopes to turn an idea into a business opportunity, a viable business model should be in place. A **sound business model** provides a framework for the venture to:

- generate revenues;
- make profits;
- produce free cash flows.

2 See Stephen Spinelli and Rob Adams, *New Venture Creation*, 10th ed. (New York: McGraw-Hill/Irwin, 2016), chaps. 3, 5, and 7. Also see Bruce R. Barringer and R. Duane Ireland, *Entrepreneurship: Successfully Launching New Ventures*, 3rd ed. (Upper Saddle River, NJ: Pearson/Prentice Hall, 2010), chaps. 2, 3, and 4. Some authors advocate the importance of flexible business models over formal written business plans. See, e.g., Steve Black, "Why the LEAN Start-Up Changes Everything," *Harvard Business Review* (May, 2013), pp. 3–9.

Each of these components needs to be achieved within a reasonable time. Having a sound business model helps the entrepreneur attract financing and increases the likelihood that the venture will survive and build value over time.

COMPONENT 1: THE BUSINESS MODEL MUST GENERATE REVENUES

First, the venture must generate sales or revenues.[3] An important component of a venture's perceived present and future value is its current level of revenues (which may be zero, if the venture is in its development stage or at the beginning of its startup stage) and the expected growth of those revenues. A successful business model provides a product or service that customers will purchase. Sound marketing plans and selling efforts are almost always necessary to generate initial sales and growth in sales over time.

In addition to marketing existing products and services, a venture's management team must develop and market new products and services to increase sales revenue. Branding the venture's products and services—to facilitate new product introduction and inhibit competitive inroads—is an important part of most ventures' marketing strategies. It would be easy if the venture could somehow keep selling its existing products and services at prevailing prices or higher. More typically, however, innovation and competition drive down prices and erode the market share held by a venture's existing products and services. In extremely competitive industries, it can be difficult to increase existing product prices at all, even just to keep up with inflation. Anyone who has bought electronic goods in the last thirty years understands this.

It is common for ventures that get to market first, or that generate defensible intellectual property, to price new products or services at high markups. The realization of high margins, however, is the bait that lures new competitors into mimicking the first mover and into investing in research, development, and legal advice to chip away at protections offered by intellectual property rights. In a competitive market economy with restricted intellectual property rights (e.g., finite patent lives), no venture can expect to sustain abnormally high margins forever. The ravages of competition may be delayed; they cannot be avoided.

COMPONENT 2: THE BUSINESS MODEL MUST MAKE PROFITS

The second component of a sound business model is after-tax operating profits. A successful venture cannot target sales growth alone. It must target growth in total venture profitability even when prices decrease as sales grow. A venture's revenues must be large enough to exceed its costs of production and services, as well as pay the venture's management team, other employees, liabilities owed to its creditors, and tax obligations. A venture's management team must be capable of managing the firm's operations efficiently and of finding and retaining the human resources

3 We use the words "sales" and "revenues" interchangeably throughout this book because both connote a dollar amount. However, there are times when it is useful to refer to unit sales and the growth in units sold. Technically, revenues can grow by raising prices of the products or services being sold, by selling more units, or by a combination of both.

necessary to carry out production and service functions. Seeking a sustainable competitive advantage on any or all of these fronts is an important component of long-term venture viability. In most cases, a successful venture that survives its rapid-growth stage understands that durable future revenues and profits require ongoing innovation, marketing, and attention to the industry's cost structure and competitive landscape.

Profitability, however, is still not enough. When a venture consumes resources, it diverts them from other potential uses. A basic principle of market economics and capitalism is that capital providers must be compensated for the venture's use of that capital. Capital can be loaned out to others or otherwise employed; consequently, the venture's plan must incorporate a return to capital providers over and above simple profitability. To understand this, suppose a venture requires a warehouse to store intermediate products before finishing them for sales. If the venture doesn't own that warehouse, it must be rented. This type of cost is easy to see because the rent typically appears directly on a statement of profits and losses (an income statement). No one overlooks the cost of this capital when there is a highly visible market for the use of that capital, and accounting conventions allow the venture to "expense" the rent payment.

Some forms of capital, however, are not so easy to see, and accounting conventions may not emphasize their immediacy and accumulation. For example, if a founder allows a sibling to invest $200,000 in a new venture, even the most charitable of siblings will likely expect to get the $200,000 back, with appreciation, at some future date. This is simply because that money could have been invested elsewhere. The expected appreciation is the cost of using the $200,000, even if it only went to purchase inventory (which appears as an asset on the venture's balance sheet rather than as a "rent" on the statement of profit and loss). Capital costs are real; while the associated payments may be deferred, no venture can ignore them in the long run. It is not prudent to ignore them even in the short run.

COMPONENT 3: THE BUSINESS MODEL MUST PRODUCE FREE CASH FLOWS

The third component of a sound business model is a future ability to pay accumulated equity capital costs by what many term "free cash flow to equity"—what remains of profits after all investment costs have been subtracted. A sound business model anticipates the cash flow associated with expansions in the venture's asset investments. In particular, growing firms typically need to expand their investments in inventories, facilities, and equipment.[4] Not all of the profit generated by selling a product (or providing a service) is "free" to be paid back to the investors when the venture must increase its asset investments.

Frequently, students (and entrepreneurs unfamiliar with accounting) will inquire where retained earnings are kept—as though they are stored inside a vault somewhere in venture headquarters. When the venture generates a profit that is not paid out to the owners, the account that grows is usually labeled "retained earnings." As this account increases over time (indicating profitability), it is natural to look

4 We will occasionally refer to expenditures for plant and equipment as "capital expenditures," or CAPEX for short.

for this great store of earnings and, presumably, value. However, in many—if not most—cases, these retained earnings are long gone, as the associated liquid asset (e.g., cash) was spent on increasing the assets so production and sales could rise. Only when the venture's profit rises above these reinvestment flows does it offer a free cash flow that can be used to repay the venture's capital providers.[5]

The venture's value to its owners is determined by the size and timing of its future free cash flows (to equity). However, having to wait to receive those future free cash flows imposes the opportunity cost of not having them now. That is, everyone would prefer to have the cash now rather than in the future. The opportunity cost of this delay is referred to as the time value of money and is due to the investor's foregone return on current use of the cash. In addition to the time value of money, investors expect to be compensated for risk—that is, the risk that the venture will be less successful than anticipated, or even a failure.

CONCEPT CHECK ▸ What are the components of a sound business model?

SECTION **2.3**

Learn from the Best Practices of Successful Entrepreneurial Ventures

It is important to realize that one can learn critical lessons from the experiences of other entrepreneurs. Knowing some of the characteristics and practices of existing, successful, high-growth, high-performance entrepreneurial ventures can help an aspiring entrepreneur understand and deliver the necessary ingredients for success. Figure 2.2 lists some of the leading practices that Donald Sexton and Forrest Seale identified in a study of successful fast-growth (high-growth, high-performance) companies for the Kauffman Center for Entrepreneurial Leadership.[6] We group these leading or "best" practices into three categories: marketing, financial, and management.

BEST MARKETING PRACTICES

Successful high-growth, high-performance firms typically sell high-quality products and provide high-quality services. These firms generally develop and introduce new products or services considered to be the best in their industries. That is, they are product and service innovation leaders. Their products typically command higher prices and profit margins. Providing high-quality products or services, being product or service innovation leaders, and being able to sell products or provide services that command high profit margins are characteristics of successful

5 While it is important to establish a sound business model where revenues will convert to profits and cash flows, it is growth or scalability of the model that creates value for the owners. The importance of growth is noted annually in various business publications. For example, see "Hot Growth Companies," *Business Week,* June 4, 2007, pp. 70–74; and "The Fastest-Growing Technology Companies," *Business 2.0,* June 2007, pp. 58–66.

6 Donald L. Sexton and Forrest I. Seale, *Leading Practices of Fast Growth Entrepreneurs: Pathways to High Performance* (Kansas City, MO: Kauffman Center for Entrepreneurial Leadership, 1997).

Figure 2.2 Best Practices of High-Growth, High-Performance Firms

Marketing Practices

* Deliver high-quality products or services
* Develop new products or services that are considered to be the best
* Offer products or services that command higher prices and margins
* Develop efficient distribution channels and superior service support facilities

Financial Practices

* Prepare detailed monthly financial plans for the next year and annual financial plans for the next five years
* Anticipate and obtain multiple rounds of financing as the venture grows
* Efficiently and effectively manage the firm's assets and financial resources and its operating performance
* Plan an exit strategy consistent with the entrepreneur's objectives and the firm's business plan

Management Practices

* Assemble a management team that is balanced in both functional area coverage and industry/market knowledge
* Employ a decision-making style that is viewed as being collaborative
* Identify and develop functional area managers who support entrepreneurial endeavors
* Assemble a board of directors that is balanced in terms of internal and external members

entrepreneurial ventures. Successful ventures tend to offer high-quality products and services while demonstrating innovative leadership and market (pricing) power.

BEST FINANCIAL PRACTICES

Many successful entrepreneurs understand the financial challenges facing rapid-growth ventures. Not surprisingly, the financial planning function becomes critical to venture success and cannot be neglected even when the entrepreneur feels her talents are best suited to other areas such as product development, marketing, or operations. Financial plans incorporating multiple contingencies are important for dealing with the financial fragility of early-stage ventures. Slight delays, lower-than-expected consumer acceptance, and key employee departure all have financial ramifications that can cripple a new venture and send it spiraling downward.

Even unexpected success can present significant financial challenges that may not be immediately obvious without a detailed financial plan. Anticipating the consequences of ramping up to meet a favorable demand shock is an important prerequisite to being able to enjoy that unexpected success. Examples of the financial tools that assist in anticipating challenges in a venture's potential future include at least one year of monthly cash-oriented projections and projected annual financial statements for the next three to five years. Rapid growth typically requires multiple rounds of financing. Successful ventures anticipate financing needs and search for the financing before the funds are actually required. Since most entrepreneurs want to retain control of the venture, their searches for financing involve some important stated and unstated constraints that can significantly increase the time spent obtaining financing.

Successful high-growth firms understand the resources required to manage the firm's assets, financial resources, and operating performance, while putting out any current "fires" and monitoring and positioning the venture for future expansion. They also develop preliminary harvest or exit strategies and, at times, consider the ramifications of current financing, investment, and operating decisions on a potential future liquidity event. They may even reflect these contemplations in a formal business plan. Keep the following in mind as you look for the business opportunities in your ideas:

> *Everything started as a dream. You gotta have insight, know what you want. You gotta have a plan. Like I tell anybody, if you fail to plan, you're planning to fail.*
>
> —Lawrence Tureau (Mr. T), actor, 1993 (interview with *The Onion*)

BEST MANAGEMENT PRACTICES

Successful entrepreneurial ventures assemble well-balanced and experienced management teams. Members of the teams have expertise across the functional areas of marketing, finance, and operations. They typically have prior success in the venture's industry and markets. While successful entrepreneurs exhibit many different managerial styles, they usually view decision making as a collaborative effort. It is critical that functional area managers share in the founder's entrepreneurial drive. Successful entrepreneurial ventures make use of the expertise provided by their boards of directors (or advisers). Summarizing, the effective entrepreneurial management team should provide expertise in the functional areas of marketing, finance, and operations; have successful experience in the venture's industry and markets; work collaboratively; and share the entrepreneurial spirit. A venture's management profile is extremely important. Some potential investors view a detailing of the management team as the most important section of a business plan.

BEST PRODUCTION OR OPERATIONS PRACTICES ARE ALSO IMPORTANT

Although Figure 2.2 does not include specific operations or production practices, we want to make sure that the importance of this functional area is not overlooked. Recall that the first item under marketing practices is to deliver high-quality products or services. It is the venture's production or operations area that carries this responsibility. Furthermore, products and services must be delivered on time. Businesses operate in real time. Customers want their products or services now or, at least, when they are promised. Otherwise, customers are likely to turn to a competitor who delivers on time. Remember that, as you move from the idea to a viable business opportunity and then to actual startup, many aspects of your products and services (like quality and timing) are critical.

CONCEPT CHECK ► What is an entrepreneurial venture?

SECTION **2.4**

Time-to-Market and Other Timing Implications

Business opportunities exist in real time, and most ideas have a relatively narrow window of opportunity to be transformed into successful business ventures. Sometimes ideas are *ahead of their time*—at least, they are too early to become viable business opportunities for the inventor or innovator.[7] For example, although the Wright brothers were pioneers in flight, their prototype was not commercially viable. Military and early commercial uses exploiting related technologies marked the beginning of that viable business opportunity. Not long ago, neither the World Wide Web nor e-commerce existed. Selling groceries "online instead of in line" and writing electronic mortgage loans were not viable business opportunities until recently. Many innovations that are now technologically feasible (including online groceries) are still struggling to become the foundations of successful commercial ventures. Often, the first attempts to deploy a new technology only partially clear the necessary education and adoption hurdles and end up merely providing data for the next generation of ventures seeking to commercially exploit the new technology.

Ideas can also be *past their time.* That is, the window of opportunity may close when someone beats you to market or when the idea focuses on a technology that is abandoned shortly after the venture is launched. If you are thinking about starting an online auction business, it is certainly technologically feasible. However, it is probably a bit late, unless you exploit a lucrative niche that for some reason has remained undiscovered by the scores of other entrepreneurs who have considered launching online auctions in recent years. Similarly, an idea to construct an infrastructure of wires and cables, to provide voice and other services to customers in developing countries, may not be a viable business idea when wireless broadband technology offers a more cost-effective means of providing high-speed, high-capacity data and voice services.

Time-to-market, particularly when one is *first to market*, is often important in determining whether an idea becomes a viable business. Time is particularly critical when ideas involve information technology because the difference of a few months may determine success or failure. eBay, Inc., an online auction house, is an interesting example of a firm's moving quickly and successfully to dominate a type of Internet business (person-to-person). Pierre Omidyar launched eBay in September 1995 after a casual dinner conversation with his fiancée, an avid collector of Pez™ candy dispensers. Omidyar had his initial contact with Internet shopping in 1993 with a firm called eShop, which was subsequently purchased by Microsoft. He then developed Web applications at General Magic. With a vision of the potential demand for consumer trading via the Internet, Omidyar designed eBay as an initial experiment to assess consumer demand. When expectations were quickly exceeded, eBay became Omidyar's full-time job. eBay currently hosts well over two million auctions each day. Movement from the idea to the business opportunity and actual startup was

7 Of course, patents and copyrights may provide some protection until an idea can become a viable business opportunity. We discuss intellectual property in Chapter 3.

very quick, even by Internet standards. As a result of being first and quick to market, eBay has not been seriously threatened by competition.

Of course, being *first to market* does not necessarily ensure success. Adam Osborne is generally given credit for having been first to market with a portable computer. Several of our faculty colleagues purchased "Osbornes" when they were introduced to the marketplace. Although we recall that the computer worked reasonably well, Adam Osborne had no sustainable competitive advantage. Other computer manufacturers that were more soundly financed and had larger support staffs quickly brought out their own versions of the portable computer; the rest is history. Dan Bricklin was first to market with spreadsheet software: VisiCalc, a name unfamiliar to most of our younger readers. VisiCalc was quickly buried by the introduction of Lotus 1–2–3, and, as we all know, the dominant product in the category was soon revealed to be Microsoft's Excel®.

CONCEPT CHECK ► What is meant by time-to-market?

SECTION 2.5

Initial "Litmus Test" for Evaluating the Business Feasibility of an Idea

Good business ideas often result from creative thinking and hard work. They may reflect new insights into particular existing products, services, or processes. They can result from more widespread product and service trends related to the evolution of our societies (so-called "megatrends"). Of course, new business ideas can also be a response to confusion and chaos. Nottingham-Spirk, a successful industrial design firm, sends employees to retail establishments such as Wal-Mart to generate product improvement ideas. They then have a "diverging" or brainstorming session involving several product designers. This initial meeting is followed by a second round of "converging" meetings where the ideas are judged.[8]

The key ingredient is the idea that provides an opportunity to create economic value for the entrepreneur (and others). In other words, a **viable venture opportunity** must meet (or create and meet) a customer need, provide at least an initial competitive advantage, have an attractive time-to-market profile, and offer the expectation of attractive investment returns.[9] We know that, during the development stage, it is normal for ideas to be abandoned along the way as the entrepreneur and venture investors evaluate whether an idea can be transformed into a viable business opportunity. Product prototypes may be required, software developed, and new process designs market-tested. While we can't tell you which ideas will make good business opportunities, we can offer some insights into criteria that

viable venture opportunity
an opportunity that creates or meets a customer need, provides an initial competitive advantage, is timely in terms of time-to-market, and offers the expectation of added value to investors

8 For more comprehensive discussions of how business opportunities are identified and developed, see Jeffry A. Timmons, *New Business Opportunities* (Acton, MA: Brick House Publishing, 1989); and Spinelli and Adams, *New Venture Creation*, chap. 5.

9 See Anne Fisher, "Ideas Made Here," at http://money.cnn.com/magazines/fortune/fortune_archive/2007/06/11/100061499/index.htm. See also: "The 25 Most Audacious Companies in America," *Inc.* (May, 2013), pp. 54–64, and "Brilliant 100," *Entrepreneur* (June, 2013), pp. 50–63.

potential investors may consider when assessing the viability of the commercialized version of your idea.

SWOT analysis

an examination of strengths, weaknesses, opportunities, and threats to determine the business opportunity viability of an idea

A useful tool in an initial investigation of business feasibility is a **SWOT analysis**. The focus of such an analysis is the strengths (S), weaknesses (W), opportunities (O), and threats (T) of the business, product, or service idea. Figure 2.3 illustrates a SWOT analysis approach. The strengths and weaknesses assessment focuses on the internal aspects of the idea; the opportunities and threats focus on the external or competitive environment.

The baby boomer population is aging quickly. As people get older, they find it more and more difficult to open food products that have twist-off caps. Consider an entrepreneur who has invented a relatively simple product to make it easier for senior citizens to open food products. Can such an idea be converted to a viable business opportunity? At a minimum, the SWOT analysis should consider the following areas as potential strengths or weaknesses:

1. Unfilled customer need
2. Intellectual property rights
3. First mover
4. Lower costs and/or higher quality
5. Experience/expertise
6. Reputation value

To begin, we ask whether there is an unfilled customer need for the new senior-friendly jar opener. Healthy demand is a strength; unproven or questionable demand is a weakness. Next, we need to determine whether there are any intellectual property rights that might shield the venture from the ravages of immediate competition. For example, can the product be patented? The ability to affordably establish intellectual property protection is a strength; the threat of immediate knock-offs is a definite weakness. By the time it is distributed, will the product be first to market?

Figure 2.3 SWOT Analysis for Initially Assessing the Feasibility of a Business Idea

I. Internal Environment

	Strengths	Weaknesses
High	1. ________	1. ________
	2. ________	2. ________
	3. ________	3. ________
Low	1. ________	1. ________
	2. ________	2. ________
	3. ________	3. ________

II. External Environment

	Opportunities	Threats
High	1. ________	1. ________
	2. ________	2. ________
	3. ________	3. ________
Low	1. ________	1. ________
	2. ________	2. ________
	3. ________	3. ________

If so, first-mover advantages can be considerable strengths; if not, there are many challenges in taking a weaker position as second (or even later) to market. High-quality production at low cost is an ideal strength; lower-quality production at any cost is most likely a weakness. Past experience can be a strength or weakness, depending on the amount and context. Reputation can open or close important doors.

The SWOT analysis should, at a minimum, consider the following areas as potential opportunities or threats:

1. Existing competition
2. Market size/market share potential
3. Substitute products or services
4. Possibility of new technologies
5. Recent or potential regulatory changes
6. International market possibilities

Competition in the targeted market is not usually considered a strength, unless it means that the market accepts new entrants (one of which is your venture's product or service). What current products assist in removing twist-off caps on food products? Well-defined existing and potential competitors that can provide comparable products are almost always a threat. Is the market large and waiting for a category killer? If so, there is probably a great opportunity; if not, then death by attrition is a definite threat. What are the substitutes for this new jar-opening technology? It is usually hard to see a large range of substitutes as anything other than a threat. On the other hand, if the product deploys some new technology that sufficiently dominates all existing ones (and is protected), then perhaps the opportunity can overcome competitors' threats involving their substitute products.

What if all existing jar-opening technologies had been deemed dangerous by regulatory authorities, but the venture's technology is fundamentally safer. This would be an important opportunity. On the other hand, if the new technology involves mechanics or materials with unproven safety, there could be a serious regulatory threat. With respect to international opportunities, there are seniors around the world and food jars are almost universal. The possibility for selling internationally might be an important opportunity if the product can be produced cheaply.

Once the SWOT analysis is completed, we should have a better (first-pass) understanding of the potential for the new jar opener to form the basis of a viable business opportunity. Should competition already exist, it would be wise to prepare a similar analysis for each major (potential) competitor. The side-by-side comparison of SWOT analyses provides an important multidimensional view of the new venture's relative competitive position.

CONCEPT CHECK ► What is meant by a SWOT analysis?

SECTION **2.6**

Screening Venture Opportunities

After passing an initial SWOT analysis, a venture seeking external financing should be subject to more formal feasibility analysis addressing qualitative and quantitative aspects of its expected growth and performance. While there are many variations in the theme of business feasibility analysis, all suggest substantial, more significant investment of time and effort to provide external reference points and data in support (or refutation) of the basic conjectures used in the SWOT analysis.

venture opportunity screening

assessment of an idea's commercial potential to produce revenue growth, financial performance, and value

Venture opportunity screening is the process of creating useful qualitative and quantitative assessments of an idea's commercial potential and its likelihood of producing revenue growth, financial performance, and value. An analogy used in the entrepreneurship literature is that venture screening involves finding "caterpillars" (ideas) that are likely to become "butterflies" (successful business or venture opportunities). When evaluating business opportunities, it is important to consider a number of different factors: industry, market, economics, competitive advantage issues, management team, and so on.[10]

We present a two-stage approach to assessing a venture's viability. The first stage emphasizes a qualitative assessment using a systematic interview with the entrepreneurial team.[11] While an interview can quickly lead to dismissing the idea, in other cases, the interview highlights the tasks to be done before more formal planning (i.e., moving from the development stage to the startup stage). The interview, in some cases, provides the first building block for a successful launch. If we assume that the interview indicates a potential "butterfly," our second stage involves applying a more quantitative screen to help determine whether venture investors are likely to fund the metamorphosis.

AN INTERVIEW WITH THE FOUNDER (ENTREPRENEUR) AND MANAGEMENT TEAM: QUALITATIVE SCREENING

Our qualitative screening takes the form of question-and-answer dialogues. While it is possible for the entrepreneur to respond in privacy, we believe that it is much more useful to seek out others to engage in a little role playing. For example, if one can seek out a friend, spouse, or other supportively skeptical party to play the role of the interviewer, the screening exercise may generate more useful input than when the entrepreneur answers the questions in isolation. Moreover, if there are other members of the management team in place, each can take the lead responsibility for responding in his areas.[12] The four individual roles are:

- Founder
- Marketing manager
- Operations manager
- Financial manager

In the event that a management team is not in place at the time of the qualitative screening, the entrepreneur or founder may have to play all of the roles.

Figure 2.4 begins the interview process with the entrepreneur and is aimed at understanding the big picture. This interview seeks information regarding the intended customers, possible competition, intellectual property, challenges to be faced, and so

10 For further discussion of the venture opportunity screening process, see Spinelli and Adams, *New Venture Creation,* chap. 5.

11 We have used variations of this approach on many occasions to assist potential entrepreneurs at the very beginning of their process of launching a venture.

12 In a classroom or executive retreat context, we like to see group members acting as the skeptical interviewer while the rest of the team formulates the best responses the context will allow.

Figure 2.4 Dialogue with Entrepreneur or Founder: The Big Picture

Interviewer:	So, let's start with the 30,000-foot view; what's this all about?
Founder:	. . .
Interviewer:	OK, it passes my "laugh test" although I'm a little light headed at this altitude. Plunging back down to earth, can you tell me a bit more about your intended customers and what they see as the benefits your venture offers?
Founder:	. . .
Interviewer:	I can see the potential, but aren't others targeting those same customers? Are none of the existing competitors' offerings similar in use and cost?
Founder:	. . .
Interviewer:	Granted, it sounds like a promising strategy, but won't others knock you off in relatively short order? Is there anything proprietary in your approach, and if so, do you have a plan to protect the related intellectual property?
Founder:	. . .
Interviewer:	Intellectual property usually means that something's new and unfamiliar. Will there be significant consumer education issues involved in using your product and services?
Founder:	. . .
Interviewer:	You're doing pretty well in your current career and one never knows when to take the plunge. So, why start now rather than later?
Founder:	. . .
Interviewer:	Will you be able to leverage your existing contacts and network? Is your network a strength or weakness relative to the competition?
Founder:	. . .
Interviewer:	Experience tells us that there's a lot of uncertainty and learning that takes place in a startup. Of course, learning takes time and resources. For your venture, how do you see the relationship between the size or scale of your startup efforts and its ability to progress through the uncertainty about viability or market acceptance? In particular, can the uncertainty be resolved more quickly if you are better financed?
Founder:	. . .
Interviewer:	Everyone understands that a business plan is outdated by the time it's printed. I'm thinking about the inevitable trade-offs each venture makes regarding things like in-house production versus outsourcing or human crafted versus robotics. What challenges does the venture face in making these decisions and subsequently adjusting them, if necessary, to changing conditions?
Founder:	. . .
Interviewer:	We look forward to watching your venture grow and prosper. Thank you for taking time out of your hectic schedule so we can look back on today and say, "We knew you when . . . ." [Or: You seem to have an interesting idea; however, our funds are committed at this time.]

on. At the conclusion of the interview, the interviewer prepares a subjective assessment and indicates one of the following:

1. High commercial potential
2. Average commercial potential
3. Low commercial potential

Figure 2.5 addresses marketing. This interview seeks information on who makes the purchase decision for the venture's product or service and who pays for the purchase. Other questions focus on market size and growth, channel and distribution challenges, and marketing and promotion needs. After receiving the responses, the interviewer appraises the venture's marketing aspect as having high, average, or low commercial potential.

Figure 2.5 Dialogue with Marketing Manager: Know Thy Customer

Interviewer:	I've noticed in the past that it's pretty important for a new venture to know its customers and how they make buying decisions. Who will write the check for the product or service you intend to sell? Is there a point person or a team that makes the purchase?
Marketing manager:	…
Interviewer:	Do you see these customers as one-timers or repeat buyers?
Marketing manager:	…
Interviewer:	What about add-ons, support, service, and consulting? Are they integral to your product or revenue strategy?
Marketing manager:	…
Interviewer:	As buyers get to know your venture, how does their experience with the product or service translate into reputation for the venture? Is there a lot of word-of-mouth opportunity or risk? Do you have to take a more direct approach to establishing your "brand"?
Marketing manager:	…
Interviewer:	Many early-stage ventures don't have the resources for extensive market research. Nonetheless, everyone agrees that one of the big issues with new ventures is making sure the entrepreneurial team understands the market's needs and how the venture's products and services fit in. Have you conducted any formal market research for the venture? Do you have a good idea what characteristics are important to potential customers?
Marketing manager:	…
Interviewer:	Tell me about the overall market. How fast is it growing? How much of this market can the venture capture in the next five years?
Marketing manager:	…
Interviewer:	Who else currently shares your market? Who will survive the five years of your expansion? How do their products and services compare to yours?
Marketing manager:	…
Interviewer:	What are your channel and distribution challenges?
Marketing manager:	…
Interviewer:	What are you thinking in terms of promoting your products and services?
Marketing manager:	…
Interviewer:	What is your plan for moving ahead? Are you conducting ongoing market research? What customer questions need to be answered for you to take the plunge?
Marketing manager:	…
Interviewer:	It sounds like you have a great opportunity. Thanks for taking the time to provide a glimpse into your world. [Or: You have an interesting idea, but we will be unable to participate at this time. Maybe we can have a further discussion in the future.]

Figure 2.6 presents a dialogue with the venture's operations manager. Information is sought on the state of the idea in terms of prototypes and whether they have been tested. What risks remain between now and successful market delivery? Are there potential development or production concerns? Again, the interviewer appraises the developmental and operational aspects as having high, average, or low commercial potential.

Figure 2.7 focuses on a dialogue with the venture's financial manager. Important questions include: What is the length of time projected before the venture will achieve breakeven? How will the venture be financed? How much outside financing will be needed and when? Again, after the responses have been given, the financial aspects are judged as having high, average, or low potential.

Figure 2.6 Dialogue with Operations Manager: Production and Development Challenges

Interviewer:	We've all heard of vaporware and experienced significant delays in products we were told were coming to market. I know it sounds a bit pessimistic, but does the venture have prototypes? Can we kick the tires, as it were?
Operations manager:	…
Interviewer:	What do you see as the big hurdles between where you are now and successful market delivery of the venture's products and services?
Operations manager:	…
Interviewer:	What steps are you planning to take to deal with the risks of development delays and production challenges? Do you have a position on quality standards?
Operations manager:	…
Interviewer:	What are the staffing, outsourcing, and supply challenges in bringing your products to market?
Operations manager:	…
Interviewer:	Where will the business be located and how much square footage are you planning to occupy?
Operations manager:	…
Interviewer:	Are you ready to move in or do you have to renovate first?
Operations manager:	…
Interviewer:	What are your production and headquarters equipment needs? Can you lease this equipment, or are you facing a big initial financing challenge?
Operations manager:	…
Interviewer:	Do you have a formal organizational structure? If so, what is it and why did you choose that structure?
Operations manager:	…
Interviewer:	Is there any significant legal work facing the venture (patents, trademarks, licensing, external financing, etc.)?
Operations manager:	…
Interviewer:	Will you be cultivating vertical or horizontal strategic alliances? If so, what is the plan for when and how these alliances will be negotiated and effected?
Operations manager:	…
Interviewer:	It sounds like you've got a good handle on the challenges. We wish you success. Thanks. [Or: You seem to have a good handle on the likely operations challenges for the venture; however, we need to develop a further understanding before considering a commitment.]

We recognize that an entrepreneur may choose to continue to pursue her idea even if the qualitative assessments are not very high. However, if the entrepreneur needs to raise a substantial amount of financial capital from outside investors, the viability of a venture with low qualitative scores should be reassessed. Only ventures receiving at least a majority of "high" assessments are likely to be candidates to "pass" our second-stage quantitative assessment of venture investor interest.[13]

13 The main purpose of the interviews is to stimulate reasonable and important introspection by the founder or team. The aspiring entrepreneur often has a solitary perspective on the viability of the new venture. Completing the dialogues allows impressions and biases to be identified and confirmed, rejected, or, in most cases, subjected to more formal inquiry before proceeding. While we do not provide sample answers to the questions of Figures 2.4–2.7, we believe that the questions themselves, when addressed seriously, will stimulate important insights on the likelihood that a caterpillar will become a butterfly.

Figure 2.7 Dialogue with Financial Manager: Financial Fortune Telling

Interviewer:	OK, you're going to have to be patient with me. Typically, I'm a big-picture person, so I'll need to keep it simple. Let's start with profit. Tell me why you think you can make a profit in this business.
Financial manager:	...
Interviewer:	Is there a minimum scale for breaking even and pushing the venture into profitability?
Financial manager:	...
Interviewer:	When you say "profit," does that include paying the entrepreneurial team a competitive wage, or are they deferring compensation to foster an earlier appearance of profitability? (More directly, are you expensing those compensation options, at least in how you think of profitability?)
Financial manager:	...
Interviewer:	Do you have projections we can look at for the next few years? I'm interested in how fast you think you will get to a sustainable market position with reasonable margins.
Financial manager:	...
Interviewer:	One of your functions is to help arrange for financing this new venture. On that front, one of your priorities is covering the startup costs. What are these, and how do you plan to secure the requisite financing? Do you have a targeted piece of the equity you're planning to sell off?
Financial manager:	...
Interviewer:	About that initial balance sheet: Are you carrying any deadweight from the venture's past?
Financial manager:	...
Interviewer:	Can you give us any idea what your first six months' and year's profit and loss are going to look like?
Financial manager:	...
Interviewer:	How about projected balance sheets to go with them?
Financial manager:	...
Interviewer:	I'm glad to see that the venture team has someone who can see the financial reflections of the venture's future achievements. Have you thought about a little longer horizon, say, five years out?
Financial manager:	...
Interviewer:	What kind of investors are you planning to pitch and how much return (1×, 2×, 5×, etc.) do you expect they will demand to help finance your venture's youthful exuberance?
Financial manager:	...
Interviewer:	Let's say I'm ready to invest. How and when do you plan to get my investment and return back to me?
Financial manager:	...
Interviewer:	Sign me up. Thanks for taking this time. We'll see you at the IPO! [Or: While you have an interesting idea, money is very tight now. Let's talk again in a few months.]

SCORING A PROSPECTIVE NEW VENTURE: QUANTITATIVE SCREENING

A more quantitative approach to assessing a proposed new venture's viability or feasibility also can be developed. Factors often considered important in evaluating a new venture's feasibility include: market size potential, industry barriers to entry, size of expected profit margins, accounting-based rates of returns, expected investment returns, potential for a future public offering, and quality of management team. These factors can, in turn, be grouped into four factor categories:

- Industry/Market (market size potential, industry barriers to entry)
- Pricing/Profitability (size of expected profit margins, accounting-based rates of returns)
- Financial/Harvest (expected investment returns, potential for an initial public offering [IPO])
- Management Team (quality of management team)

Figure 2.8 is a template developed to help quantify or score each of these four factor categories. We call it the **VOS Indicator**™. It contains a checklist to consider when calibrating a new venture's feasibility and attractiveness to venture investors. For each factor category, there are four specific items. Each item is evaluated as being high, average, or low in terms of potential attractiveness. Assign a point value of 3 for a high rating, 2 for an average rating, and 1 for a low rating. For items where there is insufficient current data to provide a reasonable approximation, an N/A

VOS Indicator™
checklist of selected criteria and metrics used to screen venture opportunities for potential attractiveness as business opportunities

Figure 2.8 Venture Opportunity Screening Guide: The VOS Indicator™

	POTENTIAL ATTRACTIVENESS		
FACTOR CATEGORIES	HIGH	AVERAGE	LOW
Industry/Market			
Market size potential			
Venture growth rate			
Market share (Year 3)			
Entry barriers			
Pricing/Profitability			
Gross margins			
After-tax margins			
Asset turnover			
Return on assets			
Financial/Harvest			
Cash flow breakeven			
Rate of return			
IPO potential			
Founder's control			
Management Team			
Experience/expertise			
Functional areas			
Flexibility/adaptability			
Entrepreneurial focus			
Total points by ranking			
Overall total points (OTP)			
Average score (OTP/16)			

Figure 2.9 Classification Guidelines for Completing the VOS Indicator™

	POTENTIAL ATTRACTIVENESS		
FACTOR CATEGORIES	HIGH	AVERAGE	LOW
Industry/Market			
Market size potential	>$100 million	$20–$100 million	<$20 million
Venture growth rate	>30%	10%–30%	<10%
Market share (Year 3)	>20% (leader)	5%–20%	<5% (follower)
Entry barriers	Legal protection	Timing/size	Few/none
Pricing/Profitability			
Gross margins	>50%	20%–50%	<20%
After-tax margins	>20%	10%–20%	<10%
Asset turnover	>3.0 turnover	1.0–3.0 turnover	<1.0 turnover
Return on assets	>25%	10%–25%	<10%
Financial/Harvest			
Cash flow breakeven	<2 years	2–4 years	>4 years
Rate of return	>50% per year	20%–50% per year	<20% per year
IPO potential	<2 years	2–5 years	>5 years
Founder's control	Majority	High minority	Low minority
Management team			
Experience/expertise	Industry/market	General/general	Little/none
Functional areas	All covered	Most covered	Few covered
Flexibility/adaptability	Quick to adapt	Able to adapt	Slow to adapt
Entrepreneurial focus	Full team	Founder	None

Notes: Market size potential refers to the expected size of the industry revenues at maturity; venture growth rate and market share are expressed in terms of the venture's revenues. These industry/market items, as well as the items under each of the other three factors, are discussed in the chapter.

(not available) can be used for a response.[14] Points are totaled for each of the three columns and added together to get the overall total. Calculate an average score by dividing the total points by the number of scored individual items (omit the N/As in this count). For example, there are sixteen items. With no N/As, a perfect score would produce forty-eight total points with an average score of 3.00, while the lowest score would be sixteen points and an average of 1.00.

Figure 2.9 contains metrics or verbal labels to be used for judging each item in the VOS Indicator™. These response categories will help the evaluator determine how each item adds to the proposed venture's overall appeal.[15] As we are trying to represent a quantitative approach that entrepreneurs and venture investors alike might utilize, it should not surprise us to find very high "expectations" for attractive new ventures. For example, for a proposed venture "home run," investors would most likely want the venture to have significant prospects for an industry demand

14 Not being able to judge an item may indicate that further due diligence is needed to accurately evaluate the potential attractiveness of the proposed venture. On the basis of the scores for the other items, further investigation efforts may be warranted.

15 It is important to understand that the metrics used in Figure 2.9 represent general guidelines in use today but are not cut-and-dried rules. In fact, some of these metrics will probably change over time as economic and operating conditions change.

in excess of $100 million where sales growth rates exceed 30 percent annually and the new venture anticipates capturing greater than 20 percent market share in that industry.[16]

Ideas that have the potential to become high-growth, high-performance ventures, or home runs, would be expected to have a preponderance of “highs” indicated on the potential attractiveness scale with an average score in the 2.34–3.00 range. An idea/opportunity that scores average (1.67–2.33) in terms of potential attractiveness also may be a viable venture opportunity; however, the expectations of the entrepreneur and venture investors for an average opportunity should be equivalent to “hitting a double.” If you proceed with such a venture, it is unlikely that it will become a home run; attracting venture investors may be more difficult. If your idea/opportunity generates a low average score (1.00–1.66) in terms of its potential attractiveness, it is probably wise to abandon the idea/opportunity and seek other ideas that might have greater venture opportunity potential. Later in this chapter, we will provide an example of the application of our VOS Indicator™.

Many of the interview questions are “leading,” in the sense that one may have an idea of what constitutes a “good” answer; however, for some of the more quantitative interview questions—and most of the categories involved in VOS™ scoring—some additional explanation of the range of expected answers is needed. While we believe it is sufficient to allow the entrepreneur or investor to grapple with most of the qualitative questions without much guidance, we now digress to expand on some of those more quantitative categories before giving an example of the application of our scoring procedure.

CONCEPT CHECK ► What is meant by a viable venture or business opportunity?

INDUSTRY/MARKET CONSIDERATIONS

The size of the industry, currently and expected, is a critical factor in the likelihood of your venture’s becoming a high-growth, high-performance firm in that industry, something very attractive to venture investors. Making generalizations is risky because there are always exceptions, but generalizations do provide benchmarks for appraising the viability of business opportunities. Of course, when exceptions arise, they should be handled qualitatively or strategically with some regard given to why the benchmarks are not relevant.

Your idea may be about an innovative product/service in a well-established industry, an industry that is in its infancy, or an industry that does not yet exist. While there is development variance across industries, we provide the following general industry guidelines for identifying potential high-growth, high-performance ventures. One rule of thumb is that the industry must have potential sales or revenues of more than $100 million to score a “high” in terms of potential attractiveness.

16 Venture investors often like to draw analogies between baseball and venture performance or attractiveness. For example, a “home run” is an investment that returns at least five times the venture investor’s initial investment. Of course, only a few business opportunities will be home runs. A “double” refers to expecting a doubling of the investment. A “single” returns only a portion of the initial investment. A “strikeout” reflects a total loss of the investment. Venture investors need an occasional home run to make up for several strikeouts.

For new industries, the projection of industry revenues should generally be for three to five years in the future. Industry revenues or sales also should be growing rapidly. Expected revenue growth during the industry's rapid-growth stage is one comparative benchmark; industries that are growing, or are expected to grow, at compound rates in excess of 30 percent per year are likely to contain high-growth, high-performance ventures. While slower-growth industries are not necessarily bad, firms in these industries are less likely to be able to attract venture capital unless they are substantially changing or consolidating the industry.

Operating in a high-growth industry, however, is not enough. A venture's expected revenue growth rate also must be assessed. High-growth, high-performance potential is generally associated with an expected annual compound growth rate in excess of 30 percent during the venture's rapid-growth stage. Potential high-growth, high-performance ventures also are expected to be industry leaders by the third year of operation. This generally means that such business opportunities will need to garner more than 20 percent market share of the industry's revenues. (Of course, this percentage depends on industry concentration.) What is important is the expectation of becoming a top player in the industry. While being first is preferred, in some industries, the third- or even fourth-place firm can still be a successful entrepreneurial venture. In contrast, if the potential venture's market share of industry revenues is expected to be small (e.g., less than 5 percent), the venture will be a follower, and, unless there are other compelling considerations and non-venture sources of capital, serious thought should be given to reformulating or abandoning the idea/opportunity.

For almost all businesses to survive, it is important that they plan to at least match their industry's average growth rate to avoid the ravages of a declining market share. Entrepreneurial ventures are typically expected, and projected, to achieve revenue growth rates in excess of the relevant industry average. If you expect a revenue growth rate below the industry average, your strategy must include some plan for operating at a competitive disadvantage in terms of economies of scale.[17] In summary, initial survival and eventual success often depend on a venture's ability to maintain or grow market share over time. Potentially successful entrepreneurial ventures should have revenue growth rates that exceed the industry average growth rate.

One should also consider barriers to entry when evaluating potential business opportunities. We look at the degree to which the proposed venture may be able to inhibit or outpace the competition. When intellectual property rights can be protected through patents, copyrights, trademarks, and so on, the potential for the idea to become a viable business opportunity is greatly enhanced. Protection can be particularly important if the idea is ahead of its time—that is, no developed market exists yet. Timing or size can also provide some protection against competitor entry into the proposed market. Being first with the idea, even if the idea cannot be legally protected, provides some competitive advantage that may discourage others from entering the market. Being relatively larger in human capital and financial backing can also inhibit competition. If, however, your venture idea faces current entry barriers and promises no future entry barriers, its potential attractiveness is low

17 Annual sales growing at a rate that is less than the industry average is a warning sign that you may need to reorganize, restructure, or even dissolve the venture. Financial distress, restructuring, and liquidation topics are covered in Chapter 16.

(other things being equal). The best situation is when no current barriers inhibit your venture but barriers to future entrants will protect your venture's future.

CONCEPT CHECK ► What is the rule-of-thumb revenue growth rate for a high-growth venture?

PRICING/PROFITABILITY CONSIDERATIONS

Several pricing and profitability tests or metrics, shown in Figure 2.9, are useful. Seeing future paying customers is not enough; at least it's not enough for a venture that may need to attract outside investors. In addition to expectations of how much customers are willing to pay for the venture's products and services, it is important to consider the direct costs of producing a product or providing a service: the cost of goods sold. Revenue minus the **cost of goods sold** gives the venture's gross profit. However, the dollar amount of **gross profit** is not a useful metric because it depends on size. Rather, it is more common to calculate the **gross profit margin**, which is gross profit divided by revenues. The magnitude of the gross profit margin is one of the most important measures of a venture's potential. The larger the gross profit margin, the greater is the cushion for covering all other business expenses while still being able to provide a sufficient return for investors. A gross profit margin greater than 50 percent indicates an attractive potential. In contrast, a gross profit margin of less than 20 percent is a serious warning sign.

A second measure of profitability is the after-tax or net profit margin. A venture's **net profit** is the dollar profit left after all expenses, including financing costs and taxes, have been deducted from the firm's revenues.[18] The **net profit margin** is calculated by dividing the expected net profit by the venture's revenues. Typically, after-tax margins greater than 20 percent suggest that the business opportunity has sufficiently attractive potential. The would-be entrepreneur probably should pause and reconsider when the after-tax margin is less than 10 percent, at least if the venture requires external financing.

When you are screening business opportunities, it is important to examine the venture's asset intensity. **Asset intensity** is a measure of the investment in assets necessary to produce or support the projected revenues. Asset intensity is calculated by dividing the venture's total assets—including cash, receivables, inventories, property, plant, and equipment—by its total revenues. It is the dollar amount of assets necessary to support a dollar of revenue. Firms that require a lot of fixed assets or net working capital (NWC; the current assets above the amount funded by current liabilities) have high asset intensity (and therefore low asset turnover). When firms with high asset intensity try to grow rapidly, they are likely to need large amounts of external financial capital, although some types of equipment may be bundled with financing through leasing arrangements. Working capital management, using such approaches as "just-in-time" inventory policies, can help reduce the working capital required to conduct business. In rare cases, supplier trade credit and a fast turnover

cost of goods sold
direct costs of producing a product or providing a service

gross profit
revenues less the cost of goods sold

gross profit margin
gross profit divided by revenues

net profit
dollar profit left after all expenses, including financing costs and taxes, have been deducted from the revenues

net profit margin
net profit divided by revenues

asset intensity
total assets divided by total revenues; the reciprocal of asset turnover

18 Chapter 4 provides a review of basic accounting terms and basic financial statements for readers who need or want to undertake such a review.

of inventory may actually be a net source of financing. This happens when current liabilities exceed current assets: The venture is operating with "negative NWC." Although we can provide numerical benchmarks for investments in NWC, we caution that many business approaches, including much of e-commerce, may result in low inventories, low fixed assets, and, therefore, extremely high asset turnovers.

asset turnover
revenues divided by total assets; the reciprocal of asset intensity

It is common practice when evaluating financial ratios to calculate the turnover of assets, which is the reciprocal of asset intensity. **Asset turnover** is revenues divided by total assets. We suggest as a starting point that a high score for asset turnover (low asset intensity) be associated with a ratio of revenues to total assets exceeding 3 (or asset intensity of 1:3; 1 dollar of assets for 3 dollars of revenue). Asset turnover ratios less than 1 (or asset intensities higher than 1) would get a low score.

return on assets (ROA)
net after-tax profit divided by total assets

return on assets (ROA) model
return on assets is the product of the net profit margin and the asset turnover ratio

To many, one of the most important measures of efficient use of assets is **return on assets (ROA)**. It is calculated by dividing the net after-tax profit by the venture's total assets. The return on assets measure can be viewed in the context of the **return on assets (ROA) model**, which expresses the return on assets as the product of the net profit margin and the asset turnover ratio. This relationship is:

$$\text{Return on Assets} = \text{Net Profit Margin} \times \text{Asset Turnover}$$
$$\text{Net Profit/Total Assets} = \text{Net Profit/Revenues} \times \text{Revenues/Total Assets}$$

Figure 2.10 depicts the dynamics of the ROA model. Net profit margins are plotted on the vertical axis; asset turnover ratios are plotted on the horizontal axis. In this model, industries that command high profit margins typically face relatively low asset turnovers. That is, substantial asset investments are usually necessary to produce high-margin products or services; if not, the high margins will tend to be decreased by entrants and competition. The computer industry is often used as an example to illustrate the Case 1 and Case 2 situations. The manufacturing and selling of computer mainframes (high margins but low sales volume) is a Case 1 example. Most products and services that are the result of technological innovations start out as Case 1 examples; this is what most entrepreneurs envision. High margins can be charged because you offer a unique (differentiated) product or service that is

Figure 2.10 Return on Assets (ROA) Model