SIXTH EDITION

ENTREPRENEURIAL FINANCE

Leach/Melicher

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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

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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).

1 PART

The Entrepreneurial Environment

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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"[I]

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

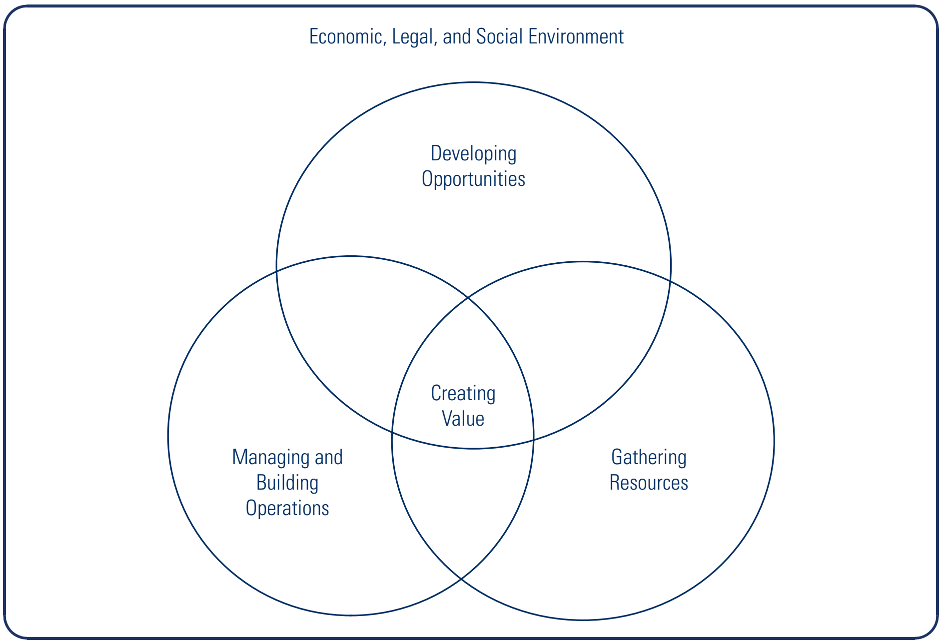

Figure 1.1 depicts an intersection of all three components—creating value. Each of the components contributes to the overall value. As a reminder of the wider context, we place the components and their intersection in the context of the venture's economic, legal, and social environment.

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.

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

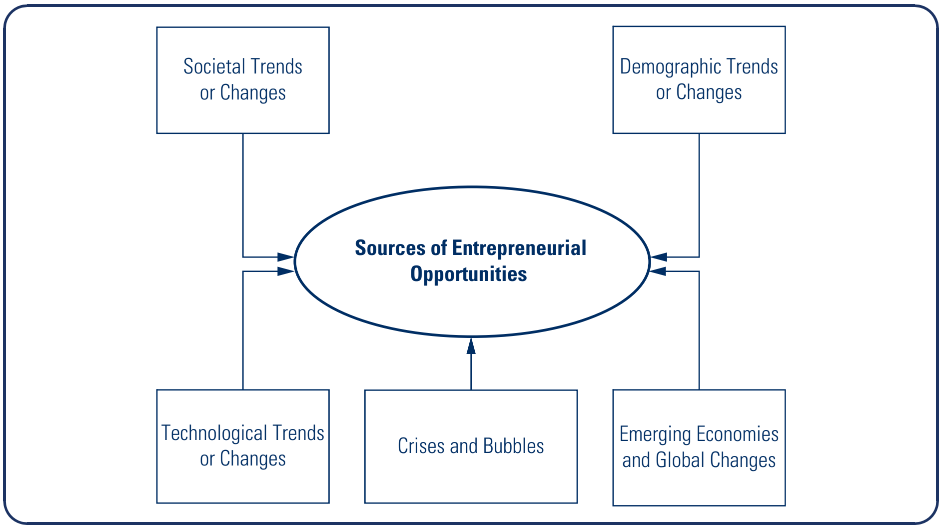
Many entrepreneurial endeavors are commercial reflections of broader societal changes. In 1982, John Naisbitt identified several major trends, or megatrends, shaping U.S. society and the world.[11] Naisbitt recognized that the U.S. economy, by the early

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.

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

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

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.

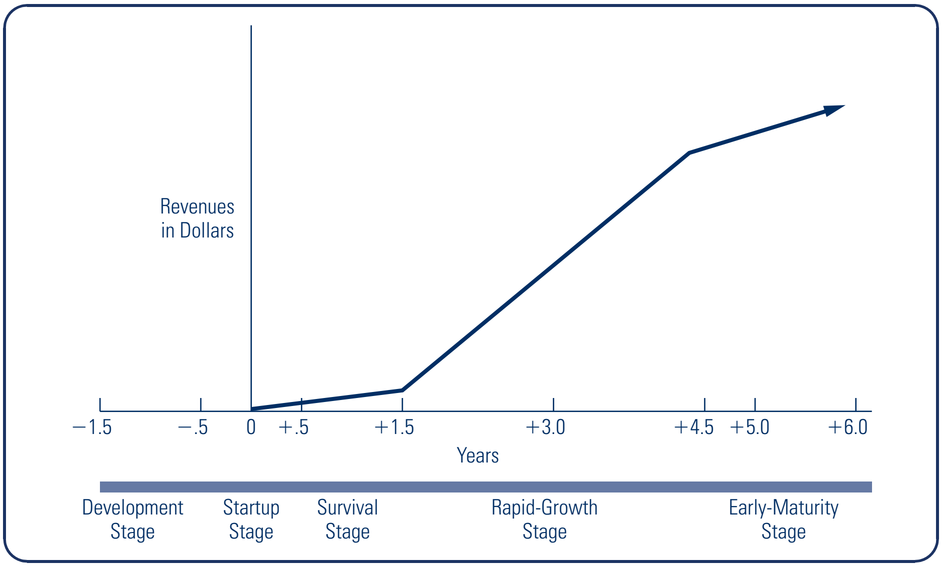
venture life cycle
stages of a successful venture's life from development through various stages of revenue growth

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

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.

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

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