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Ronald W. Melicher

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Dedication

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

Brief Contents

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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 1 (The Entrepreneurial Environment) describes several megatrends that may represent sources of entrepreneurial opportunities. 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 nonfinance 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 seventh edition of this textbook was 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 Seventh Edition

Overall changes to content and organization include:

- We refreshed the "From the Headlines" and replaced four of them with new stories.
- We rewrote the learning objectives presented at the beginning of each chapter so there now is one learning objective for each major section in 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 added material on "gig economy" and "sharing economy" societal changes that continue to evolve.
- We updated personal and corporate income tax information to reflect passage of the Tax Cuts and Jobs Act of 2017, which provided for a substantial reduction in the corporate income tax rate.
- We updated our treatment of the Jumpstart Our Business Startups (JOBS) Act of 2012 as it relates to small offering registration exemptions from SEC registration requirements both in general and when using crowdfunding to raise money.
- We updated material showing annual venture capital investment amounts to reflect the substantial increases in recent years.
- We added a discussion on ventures possibly using a "direct listing" method rather than a traditional initial public offering (IPO) to go public.

Supplements

INSTRUCTORS MANUAL

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 authors also include answers to the assignments at the end of the two capstone cases. The Instructor's Manual is available on the text Web site for instructor use 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.

COGNERO™ TESTING SOFTWARE

Cengage Learning Testing Powered by Cognero™ is a flexible, online system that allows you to author, edit, and manage test bank content from multiple Cengage Learning solutions, create multiple test versions in an instant, and deliver tests from your LMS, your classroom, or wherever you want. Written by the text authors, the Test Bank includes true/false and multiple choice questions.

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.cengage.com/finance/leach/entrepreneurial/7e 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.

We recognize the moral support of the Deming Center for Entrepreneurship (Bob Deming, and former directors Dale Meyer, Denis Nock, Kathy Simon, Steve Lawrence, and Paul Jerde). We thank the Coleman Foundation for research support for the Spatial Technology, Inc., case and the Educational Legacy Fund for research support for the Eco-Products, Inc., case.

We recognize the valuable contributions of our editorial staff at Cengage Learning. Michael Mercier was our original acquisitions editor and Mike Reynolds served as senior editor on several of our prior editions. For the seventh edition, we recognize Aaron Arnsparger, Senior Product Manager; and Content Manager, Renee Schnee. We also thank Martha Leach for research assistance behind the "From the Headlines" stories and for proofreading complete versions of earlier editions. We thank Andre Gygax, Hardjo Koerniadi, and Cody Engle who provided several important corrections to previous materials.

For their patience and insights offered during the process, we thank our colleagues who reviewed materials for this seventh edition or earlier editions of the text:

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Michael Williams, University of Denver

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

J. Chris Leach
Ronald W. Melicher

About the Authors

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

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

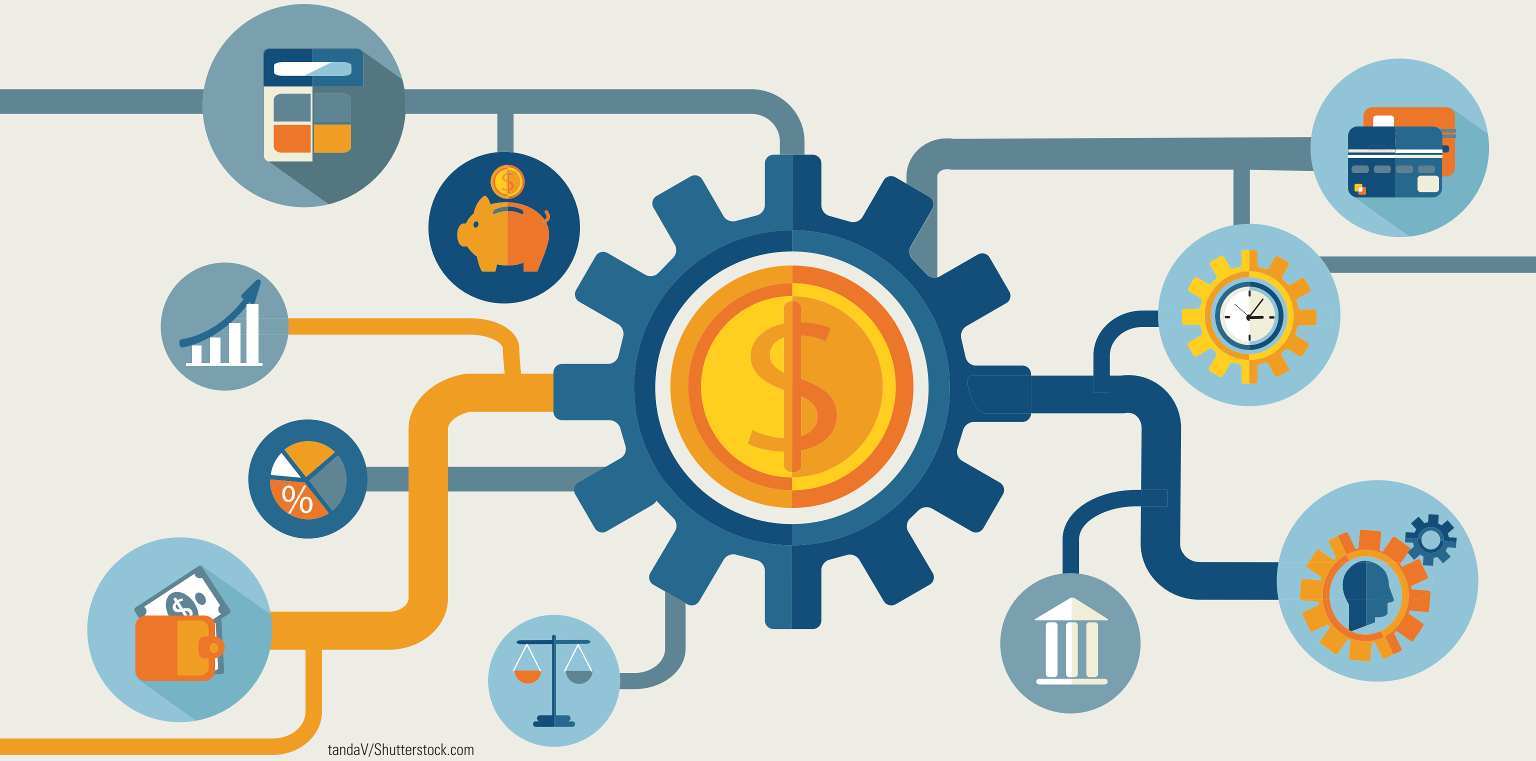
Ronald W. Melicher is Professor Emeritus of Finance in the Leeds School of Business at the University of Colorado at Boulder. He earned his undergraduate, MBA, and doctoral degrees from Washington University in St. Louis, Missouri. While at the University of Colorado, he received several distinguished 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 noncredit 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*, Seventeenth Edition (John Wiley & Sons, 2020).

PART 1

The Entrepreneurial Environment



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Introduction to Finance for Entrepreneurs

1

CHAPTER

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:

LO 1.1 Characterize the entrepreneurial process.
LO 1.2 Describe entrepreneurship and some characteristics of entrepreneurs.
LO 1.3 Indicate several megatrends providing waves of entrepreneurial opportunities.
LO 1.4 List and describe the seven principles of entrepreneurial finance.
LO 1.5 Discuss entrepreneurial finance and the role of the financial manager.
LO 1.6 Describe the various stages of a successful venture's life cycle.
LO 1.7 Identify, by life cycle stage, the relevant types of financing and investors.
LO 1.8 Understand the life cycle approach used in this book.

FROM THE HEADLINES

Get a Grip on PopSockets LLC

It isn't uncommon for an annoyance to be the genesis of a new venture. David Barnett was frustrated by organizing and storing his iPhone's corded earbuds.[1] Bluetooth headphones, first introduced in 2000,[2] would have eliminated Barnett's cord storage challenges but not those of storing wireless earbuds. Rather than focusing on the coming wireless revolution or other high-tech approaches to address his annoyance, Barnett pursued a low-tech solution. From his initial prototype of wrapping an earbud cord around glued stacks of buttons on the back of his iPhone to 3D computer-aided-designs and 60 prototypes, the collapsible accordion-based PopSockets nob/handle (https://www.popsockets.com/) rapidly evolved into a retail sensation.[3] In the process, its original intended use as an organizer for earbud cords became only one example of PopSockets' significant cell phone handling and safety advantages.[4] Indeed, many users of a single PopSockets nob/handle for the back of their cell phones don't even know the multiknob cord-storage heritage.

Barnett founded PopSockets while he was a philosophy professor at the University of Colorado Boulder. An early 2012 Kickstarter campaign set a goal of $12,000 but ended up raising $18,591 in funding. In return for a $25 pledge, participants would be sent a PopSockets case "as soon as they are manufactured—late February/early March (PopSockets will retail for $34.99)."[5] However, Barnett lost his house to a summer 2012 fire, the upside of which was that he could fund the venture with the insurance proceeds for the belongings he lost in that fire.[6] He also was fueled by "acquaintances" who invested about $500,000.[7] Despite facing serious production delays, Barnett ended up processing refund requests for only about 40 of his 500 Kickstarter backers.[8] Starting in 2014, PopSockets sold 30,000 units in the first year with $240,000 in revenue. Crunchbase lists an unspecified amount of additional investment by Peak6, a "self-funded" investor,[9] but PopSockets' avoidance of institutional venture capital has been noted by the startup community.[10] Ranked in 2018 at #2 on the Inc. 5000 list of fastest-growing companies in America,[11] and on track to having manufactured 70 million products by the end of that year,[12] it is little wonder that PopSockets is rumored to be considering a 2019 IPO.[13]

1 https://www.forbes.com/sites/amitchowdhry/2018/02/14/popsockets/#49c64f5346a9, accessed on 6/19/2019.

2 https://www.sutori.com/story/the-history-of-bluetooth-headphones--N6tTxcaHeCN9YuGsFXqs52jh, accessed on 6/19/2019.

3 https://www.forbes.com/sites/amitchowdhry/2018/02/14/popsockets/#49c64f5346a9, accessed on 6/19/2019.

4 https://www.kickstarter.com/projects/1250439912/popsockets-iphone-case-it-pops-props-kicks-and-cli, accessed on 6/19/2019.

5 Ibid.

6 https://www.forbes.com/sites/amitchowdhry/2018/02/14/popsockets/#49c64f5346a9, accessed on 6/19/2019

7 Ibid.

8 https://www.npr.org/sections/alltechconsidered/2012/09/03/160505449/when-a-kickstarter-campaign-fails-does-anyone-get-their-money-back, accessed on 6/19/2019.

9 https://www.peak6.com/strategic-capital/, accessed on 6/19/2019.

10 https://www.forbes.com/sites/amitchowdhry/2018/02/14/popsockets/#49c64f5346a9 and https://www.inc.com/brian-de-haaff/6-companies-on-inc-5000-list-that-defy-what-you-think-of-high-growth-companies.html, both accessed on 6/19/2019.

11 https://www.inc.com/guadalupe-gonzalez/2018-inc5000-top-companies.html, accessed on 6/19/2019.

12 https://www.forbes.com/sites/amitchowdhry/2018/02/14/popsockets/#49c64f5346a9, accessed on 6/19/2019.

13 https://www.bloomberg.com/news/articles/2019-02-08/philosophy-professor-preps-popsocket-ipo-after-plastic-epiphany, accessed on 6/19/2019.

It is estimated that more than one million new businesses are started in the United States each year. The Bureau of Labor Statistics of the U.S. Department of Labor estimates the "number of business establishments less than 1 year old" to have averaged over 600,000 in recent years.[1] Reasonable estimates place nonemployer (e.g., single person or small family) businesses started each year, which are not included in the Bureau of Labor Statistics data, at an even larger number.[2] 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 See Business Employment Dynamics at https://www.bls.gov/bdm/.

2 The U.S. Small Business Administration estimates that "Four in five businesses are nonemployers" (https://www.sba.gov/sites/default/files/advocacy/Nonemployer-Fact-Sheet.pdf, accessed on 6/25/2019).

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

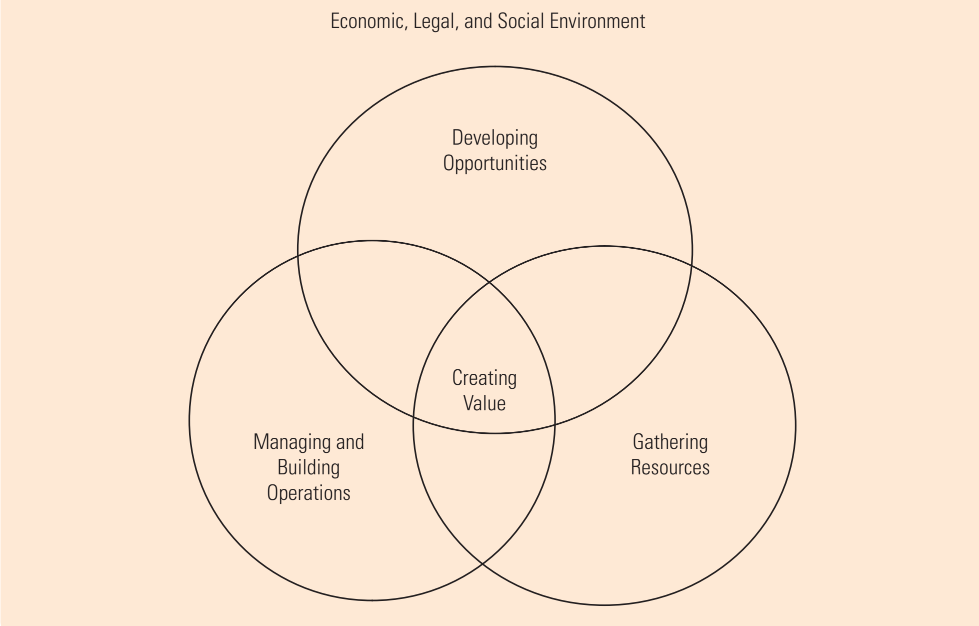

Figure 1.1 depicts an intersection of all three components—creating value. Each of the components contributes to the overall value. As a reminder of the wider context, we place the components and their intersection in the context of the venture's economic, legal, and social environment.

While entrepreneurs can succeed in almost any economic and political environment, a market-oriented economic system provides an environment fostering the formation, development, and transformation of ideas into useful products and services. *Capitalism* is a market-oriented economic system that allows private ownership of physical and financial assets, permits private production and sale of goods and services for possible profit, provides a mechanism for setting prices for allocating resources, and establishes financial markets for the exchange of claims to wealth.

A political system that allows individuals to formulate new business ideas, develop new business ventures, and reap the financial benefits when new ventures are successful is an important element when deciding where to locate an entrepreneurial endeavor. A *democracy* is a government system that grants authority and power to its people who participate in the government's decision-making process by voting either directly or through electing representatives.

The combination of democracy and capitalism is *democratic capitalism* where a country or state organized as a democracy adopts a capitalistic economic system. The United States is a country that practices democratic capitalism.[3] Examples of other countries engaging in democratic capitalism include France, Germany, and Japan and the developing countries such as India and Brazil. As the annual number of new business startups and wealth creation indicates, the United States offers potential entrepreneurs unparalleled opportunities for success. Furthermore, with its bankruptcy laws and entrepreneurial culture, there is little, if any, stigma attached to "business failure" in the United States. Indeed, entrepreneurs who have failed often apply what they learned in their next startup. In many countries, an unsuccessful entrepreneur may not get, or wish to take, that second or even third chance.

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

3 For an extensive coverage of the history of the U.S. economic system, see Alan Greenspan and Adrian Wooldridge, *Capitalism in America* (New York: Penguin Press, 2018).

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

The academic definition of "entrepreneurship" has evolved over time. In this text, we adopt a relatively short 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

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

Concept Check

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.[4] 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.

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, more than one million new business formations occur annually in the United States. Small and growing enterprises are important contributors to the growth in net new jobs.

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. Many small high-technology firms have been successful in obtaining patents and creating product innovations.

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 Bureau of Labor Statistics data, around two-thirds of new employer businesses survive at least two years and only about one-half survive for at least five years.[5]

For an 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.[6]

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

4 For example, see Jeffry A. Timmons and Stephen Spinelli, New Venture Creation, 8th ed. (New York: McGraw-Hill/Irwin, 2009), pp. 59-60. These authors address seventeen myths and realities about entrepreneurs and summarize prior efforts to identify characteristics of successful entrepreneurs.

5 See https://www.bls.gov/bdm/, accessed on 8/1/2019.

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

cite financial causes, such as excessive debt and insufficient financial capital. Other reasons include insufficient managerial experience, business conflicts, family problems, fraud, and disasters.[7]

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

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

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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. Entrepreneurs can be successful by creating extraordinary ideas or through exceptional execution of ordinary ideas.

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.

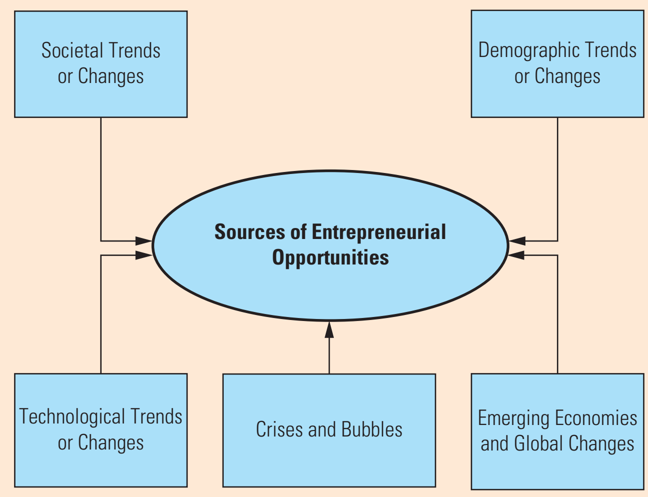
SOCIETAL CHANGES

Many entrepreneurial endeavors are commercial reflections of societal trends. In the broadest context, societal change reflects the evolution of humanity over time. Developing the ability to think and communicate effectively provided the way for humans to organize and establish larger and more stable bands or groups.[8] Evidence indicates that about 10,000 years ago, the agricultural revolution started as humans began manipulating and domesticating animal and plant species. By controlling the food supply of animals and plants, humans could organize into larger groups and stay in one location, and in the process they were able to potentially develop more stable supplies of food. As a result, human organizations became larger and more complex. About 500 years ago,

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

8 For a "New York Times Bestseller" example of this vein of pre-historical and historical sociology, see Yuval Noah Harari's *Sapiens: A Brief History of Mankind* (New York: Harper Perennial, 2015).

FIGURE 1.2 Sources of Entrepreneurial Opportunities



humans started recognizing they could obtain benefits and new powers by investing in scientific research, and thus the scientific revolution began and continues today.

Having inherited their prehistorical and historical ancestors' desires to improve crop and animal genetics, modern researchers have moved beyond crossbreeding, selective seed retention, and cross-pollination to lab-based direct genetic manipulation. However, that direct DNA-level approach to improving plant and animal genetics, broadly categorized as producing "Genetically Modified Organisms" or GMOs, has proven a far more controversial in the consumer food supply chain. Many U.S. and other consumers openly advocate for non-GMO agricultural products that are also free of antibiotics, introduced hormones, and artificial colors, flavors, and preservatives. The trend toward eating food that is more "natural" and even food clearly connected to its counterpart from the "paleo(lithic)" era (that 10,000 year-ago agricultural inflection point) seems to be a continuing trend, at least among those in the developed world with sufficient means. We also know that technologically feasible production need not lead quickly or easily to consumer acceptance or demand.

In related biotechnological developments, the ability to control existing infectious diseases and the ability to quickly develop vaccines and antidotes for new diseases (e.g., Ebola) continue to be a societal imperative. As the twenty-first century continues to unfold, medical research is likely to continue its focus on improving the quality of life and extending the length of human lives. Treatments for diseases like cancer are continuously improving survival rates. Several human body parts can now be replaced with mechanical alternatives. Gene therapies can regenerate important body and disc tissues. Not surprisingly, humans are widely predicted to live longer in the future, and some suggest we are in the process of obtaining Greek-gods-like super-human enhancements.[9] Such an overarching continuing trend offers entrepreneurs many new product and service opportunities, although recognizing the threats to adoption will always be important.

9 Harari followed his *Sapiens* bestseller with another *New York Times* Best Seller *Homo Deus: A Brief History of Tomorrow*, where he discusses the future implications as enhanced *Homo sapiens* morph into a new species *Homo Deus*, reflecting superhuman, yet flawed, characteristics like those reminiscent of the "Greek gods or Hindu devas" (New York: Harper Perennial, 2017). See also https://www.theguardian.com/books/2018/sep/14/yuval-noah-harari-the-new-threat-to-liberal-democracy, accessed on 6/28/2019.