An Opportunity to Lift All: The Power of Entrepreneurship

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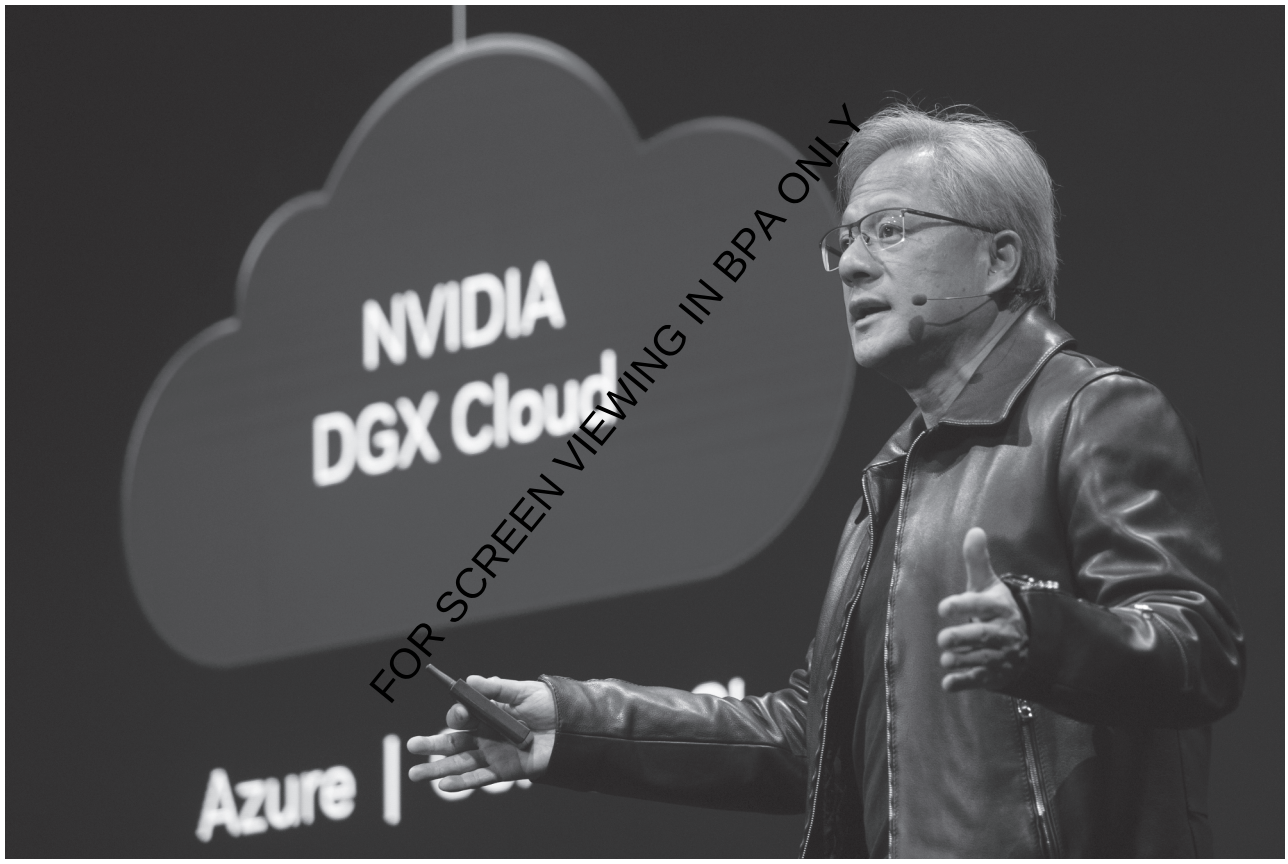

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Since 1970, 2 billion people around the world have lifted themselves out of poverty.[1] In the trailer for his documentary, *The Pursuit*, economist, policy advisor, and writer, Arthur Brooks asks, "What did that?" The answer: entrepreneurship.

Entrepreneurship is one of the most powerful forces for good in the world. When people are free to follow their own interests and set their own course in life by building their own business, prosperity follows. Not just financial prosperity, but the satisfaction of creating something from nothing, of building a team, creating jobs, providing social mobility for individuals, building better communities and many other positive benefits. As Brooks notes,[2] free markets, capitalism, and entrepreneurship can also bring billions out of poverty!

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How can entrepreneurship alleviate poverty? India's transformation during the past 70 years is an excellent example. For years after gaining its independence from Britain in 1947, the people and leaders of India debated and struggled over the best system of government for their country: socialism or capitalism. For decades, India had chosen the former. In Brooks' documentary, Hindol Sengupta, Editor-at-Large for *Fortune India,* notes that India had chosen democratic socialism and all of the companies and means of production were owned by the state.[3] Sadanand Dhume, Columnist for the *Wall Street Journal*, adds that in India at this time there was a strong belief in central planning as opposed to local and individual decision-making.[4]

In 1989 with the fall of the Berlin Wall, things began to change for many countries. With the fall of the Soviet Union, countries across the globe began to adopt the core elements of capitalism and entrepreneurship. As opposed to the central planning of administrators and bureaucrats, individuals were now being given the freedom to use their talents to pursue the opportunities they could see or create. A true age of entrepreneurship[5] was unleashed. The world moved toward core tenets of capitalism: globalization, free trade, private property rights, rule of law, entrepreneurship, and competition. India followed suit. India changed its policies in 1991 from a closed system with no competition to one permitting competition that embraced entrepreneurship. The result? India became a rising economy. Open and free competition unleashed the power of entrepreneurship to raise the standard of living in India to relieve poverty for many. In 2024, driven by its success in information technology, services, agriculture, and manufacturing, *Forbes* notes that India has the 5th largest economy in world by GDP.[6] Further, *Bloomberg Economics* expects India to overtake China as the world's biggest growth driver and the world's top contributor to GDP growth by 2028.[7]

Much of this success in India is attributed to a move toward free markets and capitalism, and a belief in individuals and their entrepreneurial abilities. Today, India is not alone: we live in an entrepreneurial age all across the globe where individuals and their start-up ventures are shaping the future.[8] This age of entrepreneurship extends beyond just the classic characterization of a unicorn start-up creating thousands of jobs and making billions of dollars. The power of entrepreneurship and acting entrepreneurially is a mighty force for good that can take many forms.

While many equate entrepreneurship with high-tech start-up ventures, the truth is that entrepreneurship is much broader than that. Perhaps you are—indeed—looking to use technology to launch a business. But maybe you want to design your own line of clothes. Perhaps you want to help reform your local government to help those in need. Regardless of your motivation and ideals, in this book you will find insights for understanding all of the things you need to accomplish to bring your venture concept forward. From opportunity shaping and business models to financing and marketing—and everything in between—we provide a toolkit of experiences across each critical aspect of venture building. So whether your focus is on creating a tech business, a gourmet catering company, a new direction for your family's firm, or a nonprofit that creates a solution to one of your regions most pressing social needs, we have you covered.

Nvidia—Riding an Evolution and Creating a Revolution

Nvidia, the Santa Clara, CA-based artificial intelligence (AI) firm, is a prime example of a tech start-up that maneuvered its way through computing evolutions and today is leading a revolution while becoming one of the most valuable companies in the world. Founded by three electrical engineers—Jensen Huang, Chris Malachowsky, and Curtis Priem—in the early 1990s, Nvidia rode the wave of the early gaming market, focusing on developing graphics processing units (GPUs). Its launch of the GeForce 256 at the turn of the century put the company on the map as it transformed the gaming industry with realistic graphics and faster performance.

Nvidia continued to evolve its expertise in graphics and the mobile device market before making acquisitions that allowed it to leverage its strengths in the semiconductor and Internet of Things (IoT) space. Today, under CEO Huang's visionary leadership and understanding of technology trends, Nvidia is leading the AI revolution as a supplier of chips that form the foundation of nearly every company's machine learning applications.

We begin your journey in this chapter by helping you understand the power of entrepreneurship throughout recent history and contextualizing its worldwide growth. We begin by examining entrepreneurship's global beginnings and its explosion in the United States in the second half of the 20th century. We build upon this evolution of venturing as it morphed into a revolution brought forward by technology which ultimately gave us the world altering Internet and Web, and also today's AI; foundations that continue to provide opportunities for entrepreneurs. The final section of Chapter 1 gives you an in depth look at the state of global entrepreneurship today by examining the entrepreneurial activity across numerous nations while also explaining the framework and conditions that spur entrepreneurship across our world.

Global Roots and an American Proliferation

We are in an entrepreneurial age and the flowers that have bloomed during this age have global roots: the word entrepreneurship was coined by the French in the 1700s and refined in the 1800s, its leading advocate for its understanding was an Austrian in the early 1900s, and the concept really took off in practice in the United States late in the last century.

Working in the 1730s, economist Richard Cantillon was the first to describe in detail the entrepreneur within the larger economic system. Cantillon's insight was bringing to bear the concept of uncertainty in the economic actions of individuals who assumed the risk of buying goods at one price and attempting to sell them at higher prices. He saw entrepreneurs as critical figures in the economy for their actions to bring together land, labor, and capital to produce new and differentiated goods and services. Cantillon described the difference of entrepreneurs as being a willingness not to be a worker with a fixed wage but to take on the uncertainty of the markets and attempt to satisfy needs while bearing the financial risks of their own venture.

The actual term "entrepreneur" was coined by the French economist Jean-Baptiste Say. Say introduced the term in his work "*Traité d'économie Politique*" (Treatise on Political Economy), published in 1803.[9] He is most commonly known for "Say's Law" which notes that supply creates its own demand. Given this perspective of Say, one can see how he moved toward the concept and idea of an entrepreneur. Say described an entrepreneur as someone who undertakes the risk of starting and managing a business and using resources to create value by producing goods and services. Say's conceptualization of the entrepreneur emphasized the reallocation of resources in driving economic development.

At the turn of the next century Joseph Schumpeter, an Austrian political economist, developed his concept of business cycles emphasizing the importance of innovation and explaining how entrepreneurship worked at a macro level. Schumpeter saw the entrepreneur as the fulcrum that could drive the ongoing success of an economy through continued cycles of innovation. He is perhaps best known for his concept of "creative destruction" explaining that new industries continuously replace older ones rendering them obsolete through the entrepreneur's implementation of new innovations.[10] Interestingly, Schumpeter's work was mostly overshadowed for decades until he was "rediscovered" by thought leaders, scholars, and entrepreneurs in the United State as the Internet took off and produced so many entrepreneurs in the late 1990s.[11]

Technology and computing power are most often at the center of what Schumpeter termed creative destruction. It was true of the beginning of the Internet in 1990s, as it was in the decades before when computer hardware then software powered so many entrepreneurial ventures. And it is still true today with the explosion of AI, perhaps best exemplified by Nvidia, the California-based start-up founded by Jensen Huang, Chris Malachowsky, and Curtis Priem, which recently ascended to become the world's most valuable company.[12] Just as the use of computing power provided the impetus for entrepreneurs to start businesses in the 1950s, 1960s, and 1970s; and the Internet (and later mobile technology) launched more entrepreneurs in the 1990s and early 2000s; Nvidia's chips and other AI technology is driving today's generation of entrepreneurs that either create AI solutions or use AI as a productivity and creativity tool.[13]

This proliferation of entrepreneurship has primarily been driven over the past handful of decades by individuals and firms in the United States, as it is part of the business and cultural fabric of the country.[14] While the United States has been surpassed by a few other countries on some economic indicators, *US News & World Report* still ranks it as the most entrepreneurial country in the world.[15]

San Francisco and the greater Silicon Valley area are the epicenter of entrepreneurship in the world but many cities in the United States have developed thriving entrepreneurial economies driven by unique regional infrastructure, attributes, talent, and history. For instance, Boston, where we live, has lots of start-ups in biotechnology, healthcare, and education driven by the city's dozens of higher education institutions and its long history of leading medical research and teaching hospitals. The Research Triangle Park area of North Carolina is a growing entrepreneurial ecosystems with similar traits.

To understand best how entrepreneurs can benefit from being part of a thriving entrepreneurial ecosystem, we should look at a little history. The historical evolution of entrepreneurship in the United States can stimulate your mind to show how industries, technologies, events, people, and hard work can converge to bring forward opportunity. This brief history can be a template for how you can think about finding, shaping, and developing your opportunity based upon what you see in today's environment.

Thriving Entrepreneurial U.S. Cities

San Francisco Bay Area, California: The Bay Area and Silicon Valley are considered the entrepreneurship capital of the world and are home to scores of venture capital firms and incubators. While it is a generator of all types of business, it is best known as a center for computer technology, fintech, and biotech firms.

New York City, New York: As the largest city in the United States, New York is flush with capital—human, financial, and technical. Its leading entrepreneurial sectors are fintech, media, and fashion.

Boston, Massachusetts: Boston also has a deep stream of talent and innovation as the U.S. higher education hub; home to esteemed institutions like MIT and Harvard. The region is particularly strong in biotech, healthcare, and education startups.

Austin, Texas: Buoyed by the annual South by Southwest (SXSW) conference that attracts technologists, artists, and entrepreneurs, Austin blends a unique mix of entrepreneurial ventures. Its culture and lower cost of living make it a top spot for aspiring entrepreneurs.

Raleigh-Durham, North Carolina: The Research Triangle Park area is a prime hub for tech and biotech startups, buoyed by major research universities Duke, North Carolina State, and the University of North Carolina.

Seattle, Washington: As the home to Amazon and Microsoft, Seattle has developed a thriving startup ecosystem focused on software, cloud computing, and e-commerce.

Los Angeles, California: As the largest city in the western United States, LA's diverse economy and creative industries support an entrepreneurial scene that covers entertainment, media, fashion, and tech.

Denver/Boulder, Colorado: Colorado is known for its strong venturing community, with strengths in tech and outdoor industries. Boulder has a high density of startups per capita and is a leader in environmental ventures.

Chicago, Illinois: Given its location and size, it is not a surprise that Chicago claims strengths in finance and logistics-based ventures. The city's central location and infrastructure is well suited to support logistics and supply chain entrepreneurs.

Miami, Florida: Miami's international geographic links, culture, and bilingual communities are a significant advantage. The city is emerging as a key entrepreneurial player especially for Latin American markets, fintech, and healthcare.

An Evolution of Entrepreneurship and Small Business in the United States

According to the U.S. Small Business Administration (SBA), there are just over 33 million small businesses in the United States today, which represents 99.9% of all businesses in the country.[16] In general, businesses with 500 or fewer employees are classified as small. This same 2023 report shows that they account for almost half the private-sector workers and 39.4% of the private payroll. The U.S. Small Business Administration shows that these small businesses make a large impact not just in the United States but also across the globe as they generate a third of the United States export value.[17]

Startups and small businesses are also an important driver of job growth. From 1995 through 2021, small businesses created 62.7% of the new net jobs in the United States employing 17.3 million people compared to 10.3 million for large companies.[18] This growth increasingly comes from people of all walks of life, showing a growth in the diversity of entrepreneurs. A 2023 report from the SBA's Office of Advocacy shows that nearly 20% of all employer-owned firms were owned by minorities.[19] Of these minority businesses in the United States, 10.4% are Asian-owned, 6.2% Hispanic, 2.4% Black, with the remaining percentage spread among Native Americans, Alaska-Native owned, and Native Hawaiian and other Pacific Islander-owned.[20]

Demonstrating a trend that can be seen in developed economies all over the world, more than a third of the 33 million small businesses in the United States come from the professional, technical, and other related services industries.[21] The majority of businesses are non-employer firms run entirely by a single proprietor and approximately 19% of all firms have between 1 and 20 employees. Over three million firms employ more than 20 people. Health care, hospitality and food services, along with the retail sector, are leading small business employers.[22]

At any one time, approximately 10.7% of all adults of working age in the United States can be classified as nascent entrepreneurs, that is, they are trying to create a new business; they have conceived an idea for a new venture and have taken at least one step toward implementing their idea.[23] Many of them abandon their ventures during the gestation period and never actually open their businesses; nonetheless, each year at least 1.5 million new ventures are born, of which about 75% start from scratch. Most of the others are purchases of existing businesses. Two in every three businesses are started in the owner's home. Most remain tiny because they are part-time businesses, but around 6,000,000 have at least one full-time employee.[24]

Fast Growing Startups

The startup world is constantly changing and as you'll see throughout this chapter companies and industries continuously churn over time. As we complete this book near the end of 2024 here are some of the fast growing tech start-ups at the moment. As you read today, how many of them are still successful?

Perplexity AI has develop generative AI-powered conversational search engine that directly answers user queries, similar to an AI chatbot. Users get access to various AI models, up-to-date information, and exceptional accuracy and contextual awareness.

ZeroTier is a platform used to deploy and maintain secure peer-to-peer networks. The virtual networks are encrypted, and only the owner has access to the encryption keys, adding another layer of security to the network.

Deepgram is an automatic speech recognition and voice AI platform. The company's key products include speech-to-text, text-to-speech, and audio intelligence AI models.

Photoroom is a photo and video editing app that offers a suite of AI editing tools. Users can easily remove image backgrounds, choose from 1,000+ new backgrounds or templates, retouch images, and much more.

Scale AI provides high-quality training data and digital infrastructure for AI applications. The company's core service is annotating and labeling large datasets (images, videos, text, audio, and 3D sensor data) to train AI models.

Source:
Adapted from https://explodingtopics.com/blog/fast-growing-companies / Last accessed on 01 Aug 2024.

For the past three decades, survival rates for new businesses have been the focus of several different studies.[25] One of the most thorough was done at the U.S. Census Bureau by Alfred Nucci, who calculated the 10-year survival rates of business establishments.[26] He found that 81% survive for at least one year, 65% for two years, 40% for five years, and 25% for ten years. The survival rate for independent start-ups was slightly lower. For example, the one-year rate was 79% instead of 81%. The chance of survival increases with age and size. Periodically, different government or industry groups examine survival rates and they all show about these same numbers. However, it is important to remember that survival rates vary somewhat with industry but not as strongly as with age and size.

It is critical to also note that survival does not necessarily spell success. In general, despite a recent pandemic and other economic worries, the National Federation of Independent Business (NFIB) notes that small business owners continue to be optimistic about their prospects.[27] This 2024 NFIB report shows that small businesses owners are generally bullish about their business consistently seeing—or hoping—for an improving economy that will allow them to follow through on hiring plans and capital outlays to improve and grow their business.

This optimism is not a surprise as historically entrepreneurs have consistently reported great satisfaction in choosing the path of entrepreneurship.[28] Entrepreneurs and small business owners report greater overall well-being and they tend to be happier than others. On the whole, those who chose a path of entrepreneurship end up more satisfied with their life and see their life as being "excellent" and "close to ideal" compared to those who do not become entrepreneurs.[29]

Today entrepreneurship and the idea of being an entrepreneur is seen positively but that was not always the case. This positivity around being an entrepreneur is a relatively new phenomenon in our business and mainstream culture. By 1970, net new business formation was growing, and the growth continued through the 1970s and 1980s and into the 1990s. One of the first documented references to what was taking place was a December 1976 article in *The Economist* called "The Coming Entrepreneurial Revolution."[30] In this article, Norman Macrae argued that the era of big business was drawing to an end and that future increases in employment would come mainly from either smaller firms or small units of big firms. In 1978, David Birch published his book, *Job Creation in America: How Our Smallest Companies Put the Most People to Work*[31]: the title says it all.

Birch showed us where the jobs were being created and no issue gets the attention of politicians more than job creation! Birch's findings and the stream of research that ensued forever changed the attitude of policy makers toward small business.[32,33] Until then, most of the research focus and understanding of how the economy operated had been on big business. Things were changing and technology from the 1960s help spur a computer subculture which acted as the foundation for many nascent entrepreneurs. As entrepreneurship began to proliferate in the 1970s and 1980s, what was an evolution began to resemble a revolution.

An Entrepreneurial Evolution Becomes a Revolution

On November 1, 1999, Chevron, Goodyear Tire & Rubber Company, Sears Roebuck, and Union Carbide were removed from the Dow Jones Industrial Average (DJIA) and replaced by Intel, Microsoft, Home Depot, and SBC Communications. Intel and Microsoft became the first two companies traded on the NASDAQ exchange to be listed in the DJIA.

This event symbolized what is now called the entrepreneurship revolution that transformed the U.S. economy in the last quarter of the 20th century. Intel and Microsoft are two major entrepreneurial driving forces in the information technology revolution that have fundamentally changed the way in which we live, work, and play. SBC (formerly Southwestern Bell Corporation) was one of the original "Baby Bells" formed after the U.S. Department of Justice antitrust action resulted in the breakup of AT&T. It is an excellent example of how breaking up a monopoly leads to entrepreneurial opportunities. And Home Depot exemplifies the big-box stores that have

transformed much of the retail industry. In the continuing example of Schumpeter's ongoing creative destruction, SBC has long since left the DJIA but today Intel, Microsoft, and Home Depot still remain and Chevron has retuned.

Dow Jones Industrial Average (DJIA) Companies

1896	1928	2024
American Cotton Oil	Allied Can	3M
American Sugar	Allied Chemical	Amazon
American Tobacco	American Smelting & Refining	American Express
Chicago Gas	American Sugar	Amgen
Distilling & Cattle Feeding	American Tobacco	Apple
General Electric	Atlantic Refining	Boeing
Laclede Gas Light	Bethlehem Steel	Caterpillar
National Lead	Chrysler	Chevron
North American	General Electric	Cisco Systems
Tennessee Coal, Iron & Railroad	General Motors	Coca-Cola
U.S. Leather	General Railway	Dow Inc.
U.S. Rubber	Goodrich	Goldman Sachs
	International Harvester	Home Depot
	International Nickel	Honeywell International
	Mack Trucks	IBM
	Nash Motors	Intel
	North American	Johnson & Johnson
	Paramount Publix	JPMorgan
	Postum	McDonald's
	Radio Corporation	Merck
	Sears Roebuck	Microsoft
	Standard Oil (NJ)	Nike
	Texas Corporation	Procter & Gamble
	Texas Gulf Sulphur	Salesforce
	Union Carbide	The Traveler's Companies
	U.S. Steel	UnitedHealth Group
	Victor Talking Machines	Verizon Communications
	Westinghouse	Visa
		Walmart
		Walt Disney

Companies like Intel, Microsoft, and Home Depot best exemplify the foundation of the entrepreneurial revolution at the turn into the 21st century. Intel was founded in Silicon Valley by Gordon Moore and Robert Noyce and funded by Arthur Rock, the legendary venture capitalist. Gordon Moore, the inventor of Moore's Law,[34] and Robert Noyce, one of the two inventors of the integrated circuit,[35] had been at the birth of Silicon Valley with William Shockley, the co-inventor of the transistor, when Shockley Semiconductor Laboratory was founded in Mountain View in 1956. They left Shockley in 1957 to found Fairchild Semiconductor, which in 1961 introduced the first commercial integrated circuit. In 1968, they left Fairchild to start Intel.

Ted Hoff, employee number 12 at Intel, invented the microprocessor in 1968. In 1971, Intel launched the first commercial microprocessor, heralding a new era in integrated electronics. Then, in 1974, it launched the first general-purpose microprocessor, the Intel 8080, which was the brain of the first personal computer,[36] the Altair 8800—a $439 hobbyist's kit—announced by MITS (Micro Instrumentation and Telemetry Systems of Albuquerque) on the front cover of the January 1, 1975, edition of Popular Electronics.

According to personal computer folklore, Paul Allen, then working at the minicomputer division of Honeywell in Massachusetts, hurried to his childhood friend and fellow computer enthusiast, Bill Gates, who was a Harvard sophomore, and waving Popular Electronics with a mock-up of the Altair 8800 on its front cover, exclaimed, "This is it! It's about to begin!" Within a month or so, Gates had a version of BASIC to run on the Altair. He and Allen joined together in an informal partnership called Microsoft and moved to Albuquerque.

Microsoft grew steadily by developing software for personal computers. By 1979, it had moved to Bellevue, Washington, near Seattle, where Gates and Allen had grown up. It then had revenue of more than $2 million and 28 employees. It got its big break in 1980–1981 when, building on the core of a product acquired from Seattle Computer Products, Microsoft introduced MS-DOS for IBM's first PC. Fourteen years later in 1995, when Microsoft released Windows 95, it sold 4 million copies in four days. Its success helped to move the personal computer into 250 million homes, businesses, and schools worldwide. In the early 1990s, Microsoft committed itself to adding Internet capabilities to its products. When Microsoft joined the DJIA in 1999, there were more than 200 million Internet users, up from 3 million just five years earlier.

Technology and computers were the drivers of this entrepreneurial revolution, but it was not restricted to just these sectors. Home Depot was founded in 1979 by Bernie Marcus and Arthur Blank. The chain of hardware and do-it-yourself (DIY) stores holds the record for the fastest time for a retailer to pass the $30 billion, $40 billion, $50 billion, $60 billion, and $70 billion annual revenue milestones and was one of the fastest to join the DJIA. Today, the Home Depot is the fifth-largest retailer in the world,[37] the fifth largest in e-commerce sales, and employs nearly a half million people.[38]

Photo Credit: Rob Kinmonth/Getty Images

Home Depot founders Arthur Blank and Bernie Marcus.

Of course, only a few of the entrepreneurial giants ever get into the DJIA, which is composed of only 30 of the most widely held stocks. The following are some of the other legendary entrepreneurs and their companies that played important roles in the entrepreneurship revolution of the last half century.

Perhaps one of the most revolutionary entrepreneurial ideas outside of high-tech industries was Fred Smith's notion to deliver packages overnight anywhere in the United States. Smith identified in a term paper that he wrote as a Yale student a need for shippers to have a system designed specifically for airfreight that could accommodate time-sensitive shipments such as medicines, computer parts, and electronics. Smith's professor did not think much of the idea and gave it a C. After tours of duty in Vietnam, Smith founded his company, Federal Express (FedEx) in 1971, and it began operating in 1973 out of Memphis International Airport. In the mid-1970s, Federal Express had taken a leading role in lobbying for air cargo deregulation, which finally came in 1977. These changes allowed Federal Express to use larger aircraft and spurred the

company's rapid growth. Today FedEx ships over 3 billion packages a year, covers every U.S. street address, and connects over 99% of the world's GDP by covering more than 220 countries and territories across the globe.[39] Smith and FedEx's importance might be overlooked by some because of the seamless way goods move across the globe and the ease and speed of e-commerce, but much of today's infrastructure is owed to Smith and the other pioneers in his industry.

While Smith was trying to find a way to more easily move packages others were moving people. In 1971, when Southwest Airlines began operations, interstate airline travel was highly regulated by the federal government, which had set up the Civil Aeronautics Board (CAB) in 1938 to regulate all domestic air transport as a public utility, setting fares, routes, and schedules. The CAB was required to ensure that the airlines had a reasonable rate of return. Most of the major airlines, whose profits were virtually guaranteed, favored the system. Not surprisingly, competition was stifled, and almost no new airlines attempted to enter the market. However, intrastate passenger travel was not regulated by the CAB, so Southwest Airline, following the pioneering path of Pacific Southwest Airline's (PSA) service within California, initiated passenger service within Texas. The success of PSA and Southwest in providing cheap airline travel within California and Texas provided powerful ammunition for the deregulation of interstate travel, which came about in 1981 as a consequence of the Airline Deregulation Act of 1978.[40] Since deregulation, more than 100 startup airlines have inaugurated interstate scheduled passenger service with jet aircraft.[41] Herb Kelleher, the charismatic cofounder of Southwest Airlines, was often credited with triggering airline deregulation by persevering with his legal battle to get Southwest airborne in the face of fierce legal opposition from established large airlines. Two of those airlines took their legal battle all the way to the U.S. Supreme Court, which ruled in Southwest's favor at the end of 1970.[42]

Robert Swanson was 27 when he began investigating biology and hit on the idea that a company could be formed to commercialize biotechnology. At that time, he knew almost nothing about the field. By reading the scientific literature, Swanson identified the leading biotechnology scientists and contacted them. "Everybody said I was too early—it would take 10 years to turn out the first microorganism from a human hormone or maybe 20 years to have a commercial product—everybody except Herb Boyer."[43] Swanson was referring to Professor Herbert Boyer at the University of California at San Francisco, co-inventor of the patents that, according to some observers, now forms the basis of the entire biotechnology industry. When Swanson and Boyer met in early 1976, they almost immediately agreed to become partners in an endeavor to explore the commercial possibilities of recombinant DNA. Boyer named their venture Genentech, an acronym for genetic engineering technology. Just seven months later, Genentech announced its first success, a genetically engineered human brain hormone, somatostatin. According to Swanson, they accomplished 10 years of development in seven months. Most observers say it was Swanson's entrepreneurial vision that brought about the founding of the biotech industry. By 2023, there were approximately 25,000 biotech companies in the world[44] with revenues of nearly $1.4 trillion which is expected to grow to $4.25 trillion in the next decade.[45]

At almost the same time that Swanson was starting Genentech in San Francisco, not many miles away Steve Jobs and Stephen Wozniak were starting Apple Computer in Silicon Valley. Their computer, the Apple I in kit form, was an instant hit with hobbyists. The Byte Shop—the first full-time computer store anywhere in the world, which opened in Silicon Valley in December 1975—ordered 25 of them in June 1976. The owner of The Byte Shop asked Jobs to put the Apple I computer board in a case because his customers were asking for complete units, not just kits. When they did so, both Apple and The Byte Shop had a hot product on their hands. The Byte Shop grew to a chain of 75 stores. "Without intending to do so, Wozniak and Jobs had launched the microcomputer by responding to consumer demand.[46]" Genentech's initial public offering (IPO) in October 1980, followed by Apple's IPO only two months later, signaled that something magical was stirring in the biotech and personal computer industries. It triggered a wave of venture capital investment and IPOs in both industries.

Entrepreneurs were at the conception and birth of new products and services that have transformed the global economy in the last 50 years. However, what turned out to be the biggest of them all began in 1989 when Tim (now Sir Timothy) Berners-Lee conceived the World Wide Web. The success of FAANG today—Meta (formerly Facebook), Amazon, Apple, Netflix, and Alphabet (formerly Google)—could not have existed if not for Berners-Lee. Today, with the proliferation of AI, we are still in the midst of a revolution that is changing our lives more profoundly and faster than anyone could have imagined before the Web became operational in 1992. When you put it in the context of technology adoption rates, this is not a surprise. No major new product has been adopted as quickly by such a large percentage of the U.S. population as the Web.

Time for New Technologies to Penetrate 25% of U.S. Population	
Household electricity (1873)	46 years
Telephone (1875)	35 years
Automobile (1885)	55 years
Airplane travel (1903)	54 years
Radio (1906)	22 years
Television (1925)	26 years
VCR (1952)	34 years
PC (1975)	15 years
Mobile Phone (1983)	13 years
World Wide Web (1992)	5 years

Source: The Wall Street Journal, June 1997; http://en.wikipedia.org/wiki/Advanced_Mobile_Phone_Service; www.netbanker.com/2000/04/internet_usage_web_

Three Revolutions Converge

In 1989, when Tim Berners-Lee wrote a proposal to develop software that resulted in the Web, he was not the first to conceive of the idea. As far back as 1945, Vannevar Bush proposed a "memex" machine with which users could create information "trails" linking related text and illustrations and store the trails for future reference.[47]

As it turned out, he was 50 years ahead of the technologies that were needed to implement his idea. After all, the first digital computer was then only a couple of years old. Fifteen years later Ted Nelson, inspired by Bush's "memex," was the first person to develop the modern version of hypertext. He wrote—prophetically, as it turned out—in 1960 that "the future of humanity is at the interactive computer screen . . . the new writing and movies will be interactive and interlinked . . . we need a world-wide network to deliver it.[48]

But Nelson, too, was far ahead of the technology. In 1962, there were fewer than 10,000 computers in the world. They cost hundreds of thousands of dollars, they were primitive machines with only a few thousand bytes of magnetic core memory, and programming them was complicated and tedious. AT&T had a monopoly over the phone lines that were used for data communication. And the ARPANET, which was the forerunner of the Internet (the network of connected computers the Web runs on) was not invented yet.[49]

Berners-Lee was a 25-year-old physics graduate of Oxford University working as a consultant at CERN, the European Particle Physics Laboratory in Geneva, Switzerland, in 1980 when he wrote his own private program for storing information using the random associations the brain makes. His Enquire program, which was never published, formed the conceptual basis for his future development of the Web.[50] In 1980, the technology existed for implementing Berners-Lee's

concept, but the power of the technology was low, and the installed base of computers was tiny compared to what it would be 10 years later. By 1989, when he revived his idea, three revolutions were ready for it. They were in digital technology, information technology (IT), and entrepreneurship. The semiconductor revolution enabled the digital revolution, which in turn enabled the IT revolution. By 1992, when the Web was released by CERN, the Internet had 1 million hosts, computers were 1,000 million times faster, and network bandwidth was 20 million times greater than 20 years earlier. The entrepreneurship revolution meant that there was an army of entrepreneurs and would-be entrepreneurs, especially in the United States, with the vision and capacity to seize the commercial opportunities presented by the Web. In February 1993, the National Center for Supercomputing Applications (NCSA) released the first alpha version of Marc Andreessen's Mosaic. By December 1994, the Web was growing at approximately 1% a day—with a doubling period of less than 10 weeks.[51] In the next 10 years, Internet usage exploded.[52] By 2022, users numbered 5 billion, which was about 60% of the entire population of the world.[53]

Entrepreneurship Revolution Strikes Gold

It was the ability to move this new technology out of the government labs and the tech community and into the mainstream that really turbocharged the Web and our entrepreneurial age. When Marc Andreessen moved to Silicon Valley in 1994 and teamed up with veteran IT entrepreneur Jim Clark, their incorporation of Mosaic Communications (later renamed Netscape Communications) brought the Web to the masses. Their intent was to create a browser that would surpass the original Mosaic. It was a classic Silicon Valley startup with programmers working 18 hours a day, 7 days a week. In October 1994, the Netscape browser was posted as a download on the Internet. In no time at all, it was the browser of choice for the majority of Web users; in December 1994, Netscape Communications began shipping Netscape Navigator, which started to produce income.

Netscape Navigator was an instant success, gaining 75% of the browser market within four months of its introduction. Netscape Communications was only 16 months old when it went public in August 1995. Its IPO was one of the most spectacular in history and made Jim Clark the first Internet billionaire. According to an article in *Fortune*, "It was the spark that touched off the Internet boom."[54]

A gold rush was under way. "Netscape mesmerized investors and captured America's imagination. More than any other company, it set the technological, social, and financial tone of the Internet age."[55] A generation of would-be entrepreneurs was inspired by Netscape's success. What's more, corporate executives from established businesses wanted to emulate Jim Barksdale, the former president of McCaw Communications, who joined Netscape's board in October 1994, became CEO in January 1995, and made a huge fortune in just eight months. Investors—both angels and venture capitalists—hustled to invest in Internet-related startups. It seemed as if everyone was panning for Internet gold, not only in Silicon Valley but also throughout the United States—and a couple of years later throughout the rest of the world.

Netscape is a superb example of American venture capital at its best, accelerating the commercialization of innovations especially at the start of revolutionary new industries driven by technology. Venture capital was in at the start of the semiconductor and the minicomputer industries in the late 1950s and early 1960s, the biotech and personal computer industries in the late 1970s, the Internet and the Web in the 1990s, 2000s, 2010s, and now is driving new innovations in AI and blockchain.

Venture capital is not invested exclusively in technology companies. It was in at the beginning of the overnight package delivery industry with its investment in Federal Express, at the start of major big-box retailers such as Home Depot and Staples, and at the creation of new airlines including JetBlue. No wonder Jiro Tokuyama, then dean of the Nomura School of Advanced Management in Japan and a highly influential economist, stated that entrepreneurial firms and venture capital are the great advantages that Americans have.[56] Since the early 1970s, 42% of all public companies can trace their roots back to venture capital, and these same companies drive innovation as they account for 85% of all R&D spending of firms.[57]

The Web presented numerous opportunities that were soon being exploited by entrepreneurs. It created a huge demand for more and more capacity on the Internet, which in turn presented opportunities for hardware and software entrepreneurs. They were fortunate to find venture capitalists eager to invest in their startups. The period from 1996 through 2000 was a golden era for venture capitalists and the entrepreneurial companies they invested in.

But the gold rush came to an end in 2000. The Internet bubble burst. Many companies failed, others were forced into fire-sale mergers, investors were hammered, many jobs were lost, and doom and gloom were pervasive. There was much hand-wringing about the incredible wastefulness of the U.S. method of financing new industries. However, by August 9, 2005—the 10th anniversary of Netscape's IPO—some companies founded during the gold rush were thriving. The market capitalization of just four of them—Google, eBay, Yahoo, and Amazon—was about $200 billion, which handily exceeded all the venture capital invested in all the Internet-related companies through 2000. Granted, there were many more losers than winners, but five years after the bust, it was clear that the world had benefited mightily from the new products, services, and businesses that this revolution created.

Causes of the Entrepreneurial Revolution

The United States has always been a nation of entrepreneurs. But why has it become more and more entrepreneurial since the end of the 1960s, creating today's global entrepreneurial surge?[58]

After The Depression of the 1930s and two World Wars, the late 1940s and the 1950s and 1960s were the era of the corporate employee. They were immortalized by William Whyte in *The Organization Man*,[59] in which he argued "that American business life had abandoned the old virtues of self-reliance and entrepreneurship in favor of a bureaucratic 'social ethic' of loyalty, security and 'belongingness.' With the rise of the post-war corporation, American individualism had disappeared from the mainstream of middle class life."[60] The key to a successful career was this: "Be loyal to the company and the company will be loyal to you." Whyte's writing assumed the change was permanent, and it favored the large corporation.

Big American businesses were seen as the way of the future, not just in the United States but worldwide. John Kenneth Galbraith's seminal book *The New Industrial State*[61] and Jean-Jacques Servan-Schreiber's *Le D'efi Am'ericain* (The American Challenge)[62] both "became the bible to advocates of industrial policies"[63] supporting big business. Both books were instant best sellers. *Le D'efi Am'ericain* sold 600,000 copies in France alone and was translated into 15 languages. Galbraith wrote in 1967, "By all but the pathologically romantic, it is now recognized that this is not the age of the small man." He believed that the best economic size for corporations was "very, very large."

The works of Whyte, Galbraith, and Servan-Schreiber were required reading in universities through the 1970s. Schumpeter's work was hardly ever mentioned,[64] and when it was, it was his book, *Capitalism, Socialism, and Democracy*, published in 1942,[65] in which he was very pessimistic that capitalism would survive. Unlike Karl Marx, who believed the proletariat would bring about the downfall of capitalism, Schumpeter reasoned that the very success of free enterprise would create a class of elites, who would favor central control of the economy and thereby curb free enterprise. His first book, *The Theory of Economic Development*,[66] originally published in German in 1911, in which he endorsed entrepreneurship, was hardly ever mentioned. What's more, in the 1970s there was an abundance of university courses dealing with Karl Marx and almost none dealing with entrepreneurship. It may not be surprising that the world was first alerted to the entrepreneurial revolution by a journalist, Norman Macrae, rather than by an academic scholar. However, about a decade later, researchers confirmed retrospectively that entrepreneurial activity had indeed been on the increase in the United States in the 1970s.[67]

Entrepreneurship did not disappear in the 1930s, 1940s, 1950s, and 1960s; it simply did not grow very much. What brought about the change in the economy that stirred up entrepreneurship

around 1970? To try to understand what changes were taking place, we need to look at the social, cultural, and political context of an economy. A framework for this perspective is presented in Figure 1.1, the GEM model for the economy.[68]

Since its inception, the central argument of the GEM model is that national economic growth is a function of two sets of interrelated activities[69]: those associated with established firms and those related directly to the entrepreneurial process. Activity among established firms explains only part of the story behind variations in economic growth. The entrepreneurial process may also account for a significant proportion of the differences in economic prosperity among countries and among many cities and regions across the globe, including places like Bangalore, London, Tel Aviv, and Singapore.

Flourishing Global Entrepreneurial Cities

London, United Kingdom: London a diverse talent pool, strong venture capital and many accelerators, that makes it especially strong in fintech, media, and creative industries.

Berlin, Germany: With a strong start up scene and an affordable cost of living, Berlin attracts entrepreneurs. The city is particularly strong in e-commerce, fintech, and creative industries.

Tel Aviv, Israel: Perhaps due to Israel's geography and history, Tel Aviv boasts one of the highest densities of startups per capita in the world. Areas of emphasis include cybersecurity, biotech, and software development.

Shanghai, China: Government support and a massive domestic market help Shanghai develop in a center for advanced manufacturing as well as fintech and e-commerce.

Singapore: The city-state offers a highly supportive regulatory environment and a strong investor network. Singapore entrepreneurs thrive in fintech, biotech, and logistics.

Bangalore, India: The "Silicon Valley of India," is talent rich in various technologies and has a large investment community. Bangalore is flush with IT startups, software development firms, and innovation centers.

Toronto, Canada: Toronto has a growing startup community centered around strengths in AI, fintech, and health tech. A highly educated workforce and strong network of accelerators round out this entrepreneurial ecosystem.

Stockholm, Sweden: Stockholm is a leading hub for innovation in Europe and entrepreneurs. The city is particularly strong in fintech, gaming, and the intersection of arts and technology.

Amsterdam, Netherlands: Entrepreneurship in Amsterdam is known for its strengths in technology, fintech, and creative industries. The high quality of life makes it an appealing place for entrepreneurs.

Sydney, Australia: Sydney is a leading entrepreneurial hub in the Asia-Pacific region due to its supportive business environment and access to a skilled workforce. Many of the city's entrepreneurs cluster in fintech, health tech, and creative industries.

When looking at the nature of the relationship between entrepreneurship and economic growth, it is important to distinguish between entrepreneurial opportunities and entrepreneurial capacity. What drives entrepreneurial activity is that people perceive opportunities and have the skills and motivation to exploit them. The outcome is the creation of new firms and, inevitably, the destruction of inefficient or outmoded existing firms. Schumpeter's process of creative destruction is captured in the model by business churning. Despite its negative connotation, creative destruction actually has a positive impact on economic growth—declining businesses are phased out as startups maneuver their way into the market. These dynamic transactions occur within a particular context, which the GEM model calls *entrepreneurial framework conditions* and includes factors such as availability of finance, government policies and programs designed to support startups, R&D transfer, physical and human infrastructure, education in general, education and training for entrepreneurship, cultural and social norms, and internal market openness.

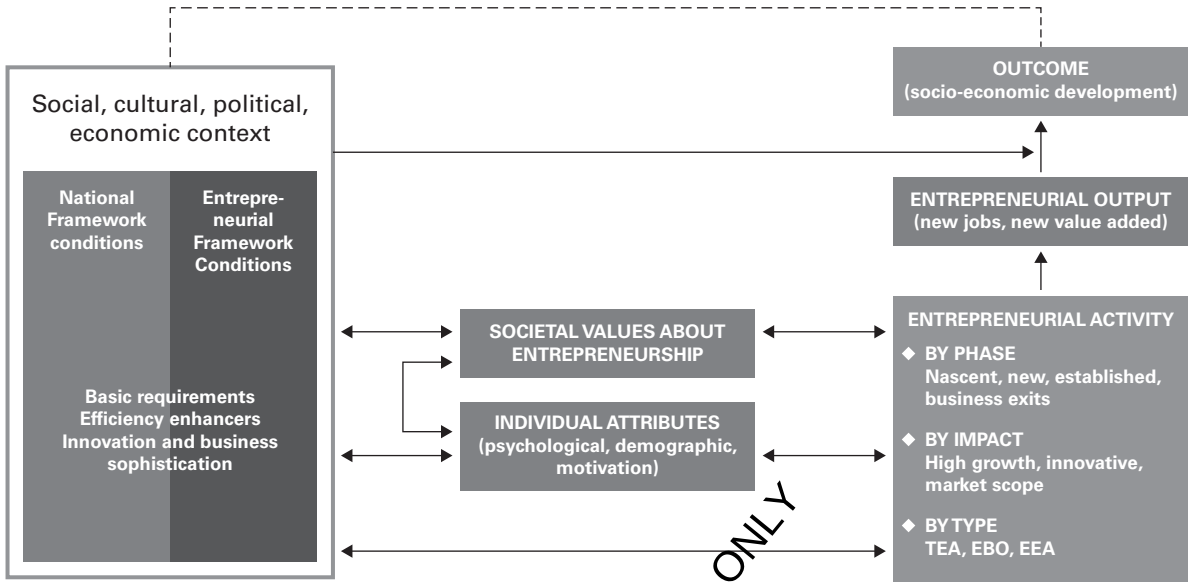

FIGURE 1.1 The GEM Conceptual Framework.

Changes in the Entrepreneurial Framework Conditions

Now let's look at some of the major changes in the framework conditions that have fueled the entrepreneurial revolution.

Cultural and Social Norms

First, let's consider the most important components, the entrepreneurs themselves. In the 1960s, a generation of Americans born in the late 1930s and the 1940s—including the first baby boomers—came of age. They had no firsthand memory of the Great Depression. When they were growing up, the economy was doing well most of the time, so they really had not experienced hard times like their parents had endured.

Hence, they were not as concerned about job security. Many were even rebelling against large corporations, some of which were seen as members of the military-industrial complex that was supporting the very unpopular war in Vietnam; some companies were trading with South Africa, where apartheid still prevailed; and others were under attack by consumer activists such as Ralph Nader.[70] It was a generation of Americans who were better educated than their parents, and for them, starting a new business was a credible career.

The *Fortune* 500 employed 20% of the workforce in the 1960s. That percentage began to decline in 1980 and has continued to do so every year since then. Today, less than 1% of people worldwide work for a Fortune 500 firm.[71] Other important social changes boosted entrepreneurship in the 1990s and into the 2000s. More women became business owners, and the proportion of Asian-owned firms increased, as did Hispanic-owned and African American–owned firms. To many people with limited options in employment, entrepreneurship represents the "last meritocracy." Today, many of the societal changes of recent decades continue. Increasingly, digitization, shifts in business models, resources distribution, working from home, and a cultural evolution of workers and customers who expect outcomes beyond just pure economics drive our societal norms.

Government

Previously, many countries focused most of their economic policies on big business but during the entrepreneurial revolution of the late 1900s things began to change. The United States

recognized the need to pay attention to startups with high potential, especially the ones funded by venture capitalists. There had been a burst of venture capital-backed startups in the last half of the 1960s. But in the early 1970s, venture capital dried up to a trickle. Looking back from the perspective of 2023, when today $170 billion of new money flowing into the venture capital industry seems routine,[72] it is scarcely believable that only $10 million of new money was committed in 1975. Congress took urgent steps in 1978 to stimulate the venture capital industry, including reducing the capital gains tax and easing the ERISA prudent man rule, which had inhibited pension funds from investing in venture capital funds. When pensions were allowed to invest a small portion of their assets into venture-backed firms, the floodgates opened, and the inflow of venture capital increased to $4.9 billion by 1987.

While some people and pundits like to rail against government interference in business, the government asserted its role of ensuring *market openness* by minimizing anticompetitive behavior. We've already mentioned that legislation toward the end of the 1970s deregulated the air-freight and airline passenger industries. That was followed in the early 1980s by the U.S. Justice Department's move to break up AT&T's monopoly, a precursor to today's mobile phone industry and all of the industries and businesses now dependent upon such a platform.

The government deserves immense credit for its funding of R&D in government, universities, and corporations, both directly and indirectly, through purchases of products. Its support was vital in the development of the computer, communications, biotech, and many other industries.

Washington activated the Small Business Innovation Research (SBIR) program in 1983 to ensure that small businesses shared some of the federal R&D dollars for new technology-based developments. In 2022, the SBIR has $4.3 billion set aside to support the financing of cutting-edge technologies developed by small businesses.[73]

R&D Transfer

The government also set smart policy for entrepreneurship and the country with landmark change debated throughout the late 1970s. Commercial development of intellectual property resulting from federally funded research became a major benefit to the U.S. economy with the passage of the Bayh–Dole Act, implemented in 1980. The primary intent of that law was to foster the growth of technology-based small businesses by allowing them to own the patents that arose from federally sponsored research. Under Bayh–Dole, universities were allowed to grant exclusive licenses—a feature that was regarded as crucial if small businesses were to commercialize high technologies that were inherently risky propositions.[74]

Before 1980, U.S. universities were granted about 300 patents a year. In 2022, the University of California received nearly 600 patents on its own and, collectively, the top 100 U.S. universities received about 6,000.[75] In 1980, 25 to 30 universities had offices for technology transfer. Today, AUTM, the Association of University Technology Managers notes there are over 3,000 professionals working in such offices worldwide.[76] In 2022, *The Economist* hailed Bayh–Dole as "the most inspired piece of legislation to be enacted in America over the past half-century." *The Economist* estimated that Bayh–Dole had created 2,000 new companies and 260,000 new jobs and had contributed $40 billion annually to the U.S. economy.[77] Today, the Bayh–Doyle Coalition reports that "Over the past 43 years, the Bayh–Dole Act has supported more than 6 million jobs and contributed nearly $2 trillion to America's economy."[78]

Physical Infrastructure

While today's advent of AI and the ubiquitous use of social media continually will affect how entrepreneurs run their ventures, the biggest changes (and opportunities) in entrepreneurship in the last few decades were due to the Web. Small businesses now had at their fingertips a tool so powerful that it leveled the playing field. Big businesses no longer enjoy as many scale of economies as they did before the Internet. Information that could have been gathered only by a

multitude of market researchers can now be found with a search engine and a couple of clicks of a mouse. And this leveling of the playing field will likely continue as the productive and creative uses of AI continue to reach businesses of all types and size.

The revolution of selling online began in earnest with eBay, is now driven by Amazon, but most every company—big and small—sells online as a primary channel. Looking back, a 2005 study by ACNielsen International Research, reported that 724,000 Americans sold online via eBay in 2005 and that it was their primary or secondary source of income.[79] By contrast in 2024, eBay has 18 million sellers on its site with just under 900,000 eBay stores covering everything from automotive parts, to clothing, to accessories of all types.[80] This same report notes that nearly a third of all sellers are based in the United States. Overall, 20.1% of retail purchases are expected to take place online in 2024 and that number is expected to grow to 23% in another three years.[81] The global e-commerce marketplace expands opportunities for entrepreneurs and it, too, is expected to grow from sales of $6.3 trillion in 2024 to $7.9 trillion in 2027.[82] Social media e-commerce is continuing to grow as consumers continue to buy through the various social media apps they use. Analysts expect this channel to explode in the coming years; from the $992 billion in sales in 2022 to an expected $8.5 trillion by 2030.[83] This on-going transition of the selling infrastructure and how consumers want to purchase means entrepreneurs need to be facile and ready to learn how to use multiple sales channels.

Outsourcing services and goods makes companies more efficient and effective. While it can be true that entrepreneurs need to "do everything" within their venture at the start, they also have the opportunity to focus on their company's core competency and let vendors take care of noncore items such as payroll, Web hosting, manufacturing, and distribution. Outsourcing enables small businesses to act like big ones, while others embrace being *virtual companies* by outsourcing the majority of their work. Many of these firms do not have a physical location opting instead for a shared workspace, with the number of co-working spaces worldwide growing from 16,000 in 2018 to 42,000 in 2024.[84]

For some entrepreneurs, the move to a shared workspace comes after they move from their on-campus incubator or other form of short-term accelerator. All of these forms of space for nascent and growing entrepreneurs provide not only physical space but also shared services and a network of like-minded individuals. In 1980, there were only 12 business incubators in the United States; over the period between 1985 and 1995, the number of U.S. incubators grew 15-fold, from 40 to nearly 600.[85] Today, the International Business Innovation Association (INBIA) estimates that there are over 7,000 incubators.[86]

Human Infrastructure

Access to human infrastructure is as important as access to physical infrastructure—maybe more so. The human infrastructure for entrepreneurs grew rapidly in the last 20 years or so, and gaining access to it has never been easier. Thirty years ago, starting a new venture was a lonely pursuit, fraught with pitfalls that would have been avoided by someone with prior entrepreneurial experience. Today numerous entrepreneurship experts gladly help people who are starting or growing companies. There are incubators, accelerators, support networks, both informal and formal, of professionals who know a lot about the entrepreneurial process.

Education, Training, and Professionalization

Entrepreneurship education and training is now readily available, part of the professionalization of entrepreneurship that has taken place over the past few decades. Today, more than 5,000 course are offered worldwide with nearly 300 schools providing entrepreneurship majors.[87] Entrepreneurs can get schooled in the art of business planning on campuses or at boot camps, in incubators and accelerators, and all sorts of programs. Today's training drives entrepreneurs to understand their opportunity and market, to understand how to create real value for their

customers and themselves, and to develop the deliverables to communicate their vision. Successful entrepreneurs who grow may someday need a formal business plan, but at the start it is more important that they understand business planning and the necessary tools they need to craft at the start (summaries, pitch decks, financial projections, etc.).

Financial

Raising money for a new business is seldom easy, but the process of raising startup and expansion capital has become more efficient in the last half century. In 1982, for instance, an economist at the National Science Foundation stated that venture capital was shrouded in empirical secrecy and an aura of beliefs.[88] The same belief held true for angel investing. In contrast, today there is an abundance of help. The National Venture Capital Association (NVCA) reports that in 2021 U.S. venture capital investment reached $335 billion more than doubling since the record-high of $159 billion, set in 2020.[89] The NVCA also notes that $224 billion was spent on research and development by VC-backed firms in 2020 up from essentially zero in the 1970s. And then there is crowdfunding, a global phenomenon which as of January 2024, more than 23 million people have pledged an astounding $8.1 billion supporting over a quarter of a million successfully funding projects.[90] Angel investors are an early source of funding for entrepreneurs and the Angel Capital Association's noted that ACA members invested $950 million in 2021 in more than 1,000 companies.[91] It is impossible to claim that the availability of financing has driven the entrepreneurial revolution, but it does appear that sufficient financing has been available to fuel it.

Global Entrepreneurship Monitor

Now that we have a better understanding of the framework conditions that affect entrepreneurship and the process and phases businesses go through as they emerge, let's look at the GEM study in detail to understand entrepreneurial activity across the globe. Before we do, it is interesting to note that the larger GEM project is an excellent example of not-for-profit social entrepreneurship. It was conceived in 1997 by Babson College and London Business School professors. It was prototyped with bootstrap funding and volunteers and was officially launched in 1998 with research teams from 10 nations. It produces annual global reports on the overall state of entrepreneurship in those nations, country-specific reports, and reports on special topics such as female entrepreneurship, financing, job creation and the impact that the recent global pandemic had on entrepreneurship. More than 100 global and regional reports can be read and downloaded at www.gemconsortium.org.

GEM was created to study the economic impact and the determinants of national level entrepreneurial activity and Figure 1.2 shows the GEM study's phases of entrepreneurial activity and indicators. GEM is the largest coordinated research effort ever undertaken to study population-level entrepreneurial activity. Since its inception, a total of 99 economies accounting for approximately 95% of the world's GDP and 85% of its population have participated in GEM's annual study. This section of Chapter 1 is based on the findings from the GEM 2023/2024 Global Report,[92] the 25th Anniversary Report which explores the entrepreneurial activity from 46 economies around the globe. Because of this worldwide reach and rigorous scientific method, GEM has become the world's most influential and authoritative source of empirical data and expertise on the entrepreneurial potential of nations.[93]

The main objectives of GEM are to gather data that measure the entrepreneurial activity of nations and other data related to entrepreneurial activity, to examine what national characteristics are related to levels of entrepreneurial activity, and to explain how differences in entrepreneurial activity are related to different levels of economic growth among nations. GEM distinguishes between two types of business: **Total Early-Stage Entrepreneurial Activity (TEA)** which represents the percentage of adults (18–64) who are starting or running a new business, defined as one that has not yet paid wages or salaries for more than 42 months; and second, **Established Business Ownership (EBO)**, which shows the percentage of adults (18–64) who are currently

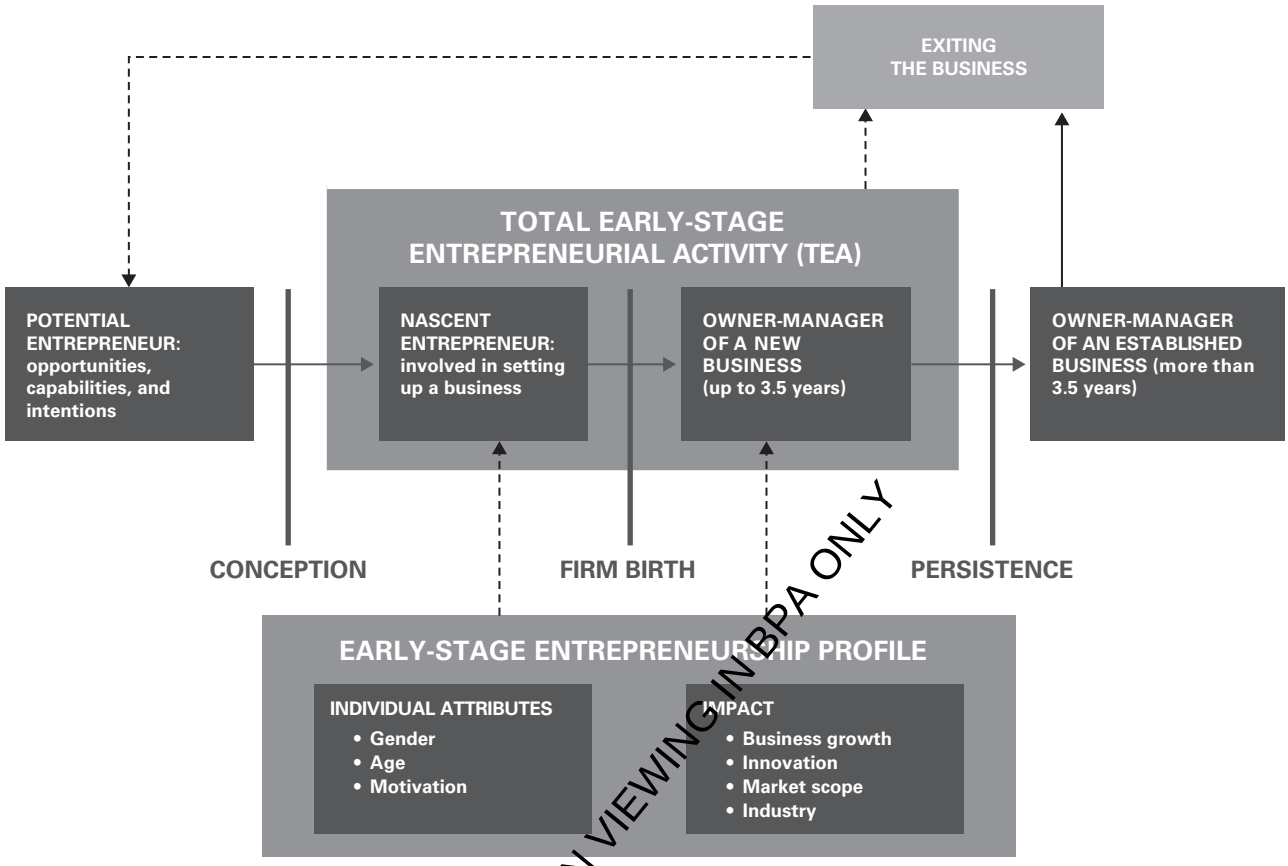

FIGURE 1.2 Phases of the Entrepreneurship Process and GEM Indicators.
Source: Global Entrepreneurship Monitor 2022/2023 Global Report.

the owner–manager of an established business, (i.e., owning and managing a business that has paid wages, salaries or any other form of payment to the owners for more than 42 months).

Principal Findings from GEM

For the 2023/24 Global Report, GEM researchers compiled data from individuals in different economies, collectively representing all regions of the world and a broad range of economic development levels. One important feature of this 25th anniversary report of GEM is the National Entrepreneurial Context Index (NECI), a composite measure of the health of the entrepreneurial context in each economy, which can be seen in Figure 1.3. Based upon a dozen framework conditions, NECI can be used to assess the environment for entrepreneurship in an economy in one simple composite number. It allows policy makers and practitioners to benchmark results between peer economies and identify areas to address, as they seek to enhance an economy's entrepreneurial potential and impact. Comparisons can still be difficult to make due to the different developmental level of each economy, but the NECI score provides a quick snapshot of how one country may be doing relative to its peers. To put all of the GEM global data into better context peer economies are identified as Level A, B, or C based upon their Gross Domestic Product per capita. Countries and economies in Level A have a GDP per capita of greater than $50,000, whereas Level C is below $25,000, and Level B is in between those two. Grouping countries in this manner allows for cleaner comparisons and greater understanding.

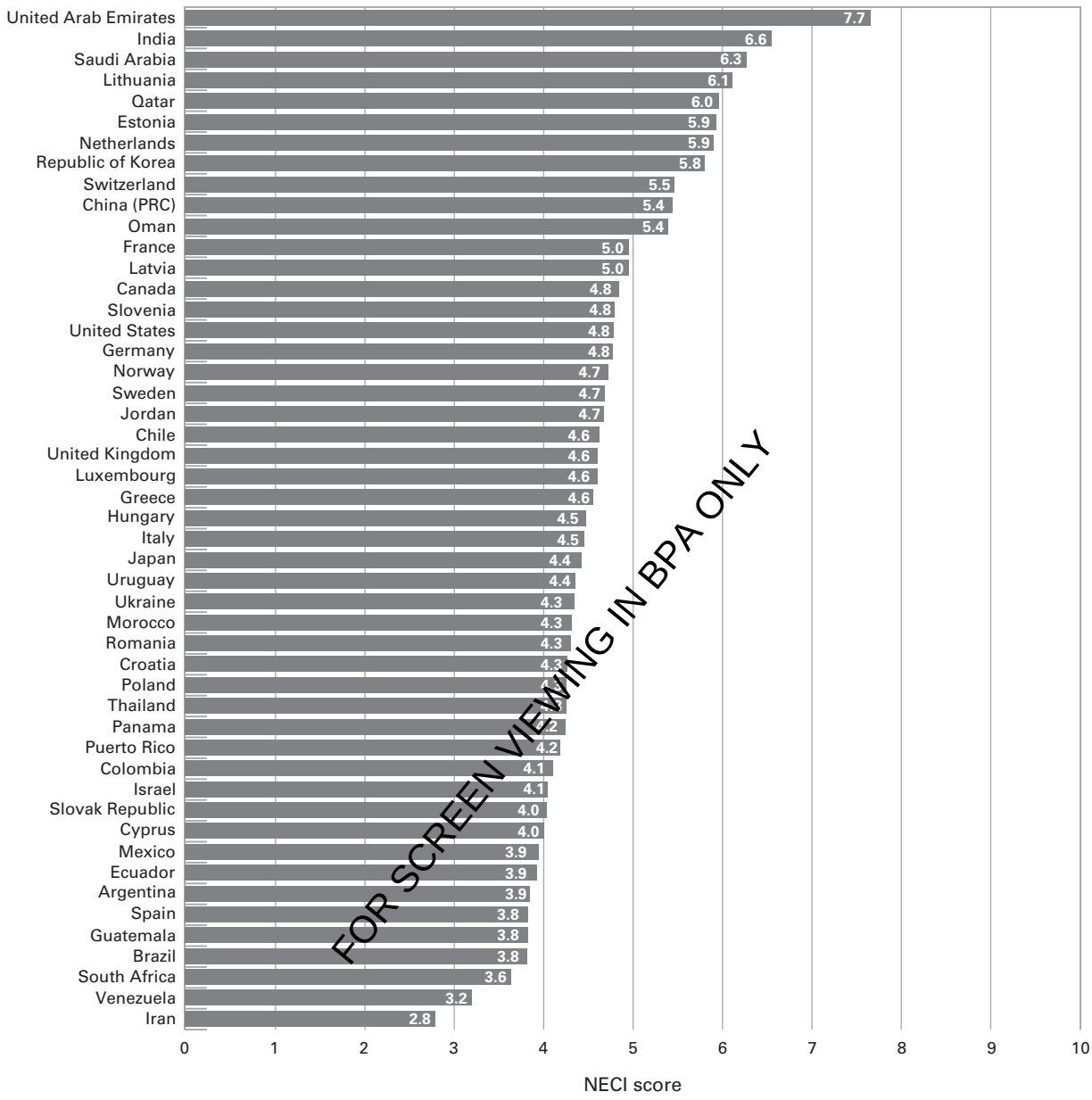

FIGURE 1.3 The National Entrepreneurial Context Index (NECI).
Source: Global Entrepreneurship Monitor 2022/2023 Global Report.

Activity

Total Entrepreneurial Activity (TEA) is a key indicator of GEM and measures the percentage of adults (age 18–64) in an economy who are nascent and new entrepreneurs. In economies with low GDP per capita, TEA rates tend to be high, due to the fact that there may be fewer opportunities for jobs with established companies. Individuals that pursue entrepreneurship because they have few or no other options in their economy are sometimes referred to as **necessity-based entrepreneurs**. Conversely, high GDP economies can show lower levels of entrepreneurship, due to a flourishing economy and bountiful job opportunities. In economies such as this, many of those that pursue entrepreneurship despite the abundance of jobs options are termed

opportunity-based entrepreneurs. They attempt to start a new venture not out of necessity (no jobs, poor economy, etc.), but because they are motivated by an opportunity they perceive they can develop. To at least some extent then, development levels are associated with particular patterns in the level and type of entrepreneurial activity. A presence of large multinational corporations in your country, other large and medium size companies, together with Established Business Owners (EBOs) are likely to have an effect on the number of individuals that will engage in early-stage entrepreneurial activity. This relationship can be seen in Figure 1.4.

Necessity-entrepreneurship effects can be understood better by looking across economic levels. For instance, there were five Level C economies with one in five or more adults starting or running a new business, compared to four in Level B and just one in Level A (Saudi Arabia). Additionally, more than three in 10 adults were starting or running a new business in four economies (Guatemala, Ecuador, Chile, and Panama) and they are all in the Latin America and the Caribbean region. The relationship between early-stage entrepreneurial activity and income has been present in GEM reports for some time now. It appears that, in general, as an individual's income rises and there are more job opportunities, the necessity to start a business decreases. We then see a larger percentage of opportunity-based entrepreneurs as the economy grows. At this point, more individuals seeking to become entrepreneurs do so because they want to, not because the conditions around them force them to.

As Figure 1.4 shows, levels of EBO are mostly lower and exhibit less variation compared to TEA. Approximately one in five adults own an established business in Ecuador and the Republic of Korea, while fewer than one in 20 adults do so in 11 economies spread across different regions and income groups. The correlation between EBO and income is less distinct than that of TEA. Unlike the trend observed in prior years, three Level C economies—Morocco, Iran, and India—now demonstrate parity or higher levels of EBO compared to TEA. This emerging trend suggests that businesses in these economies are sustaining for longer periods.

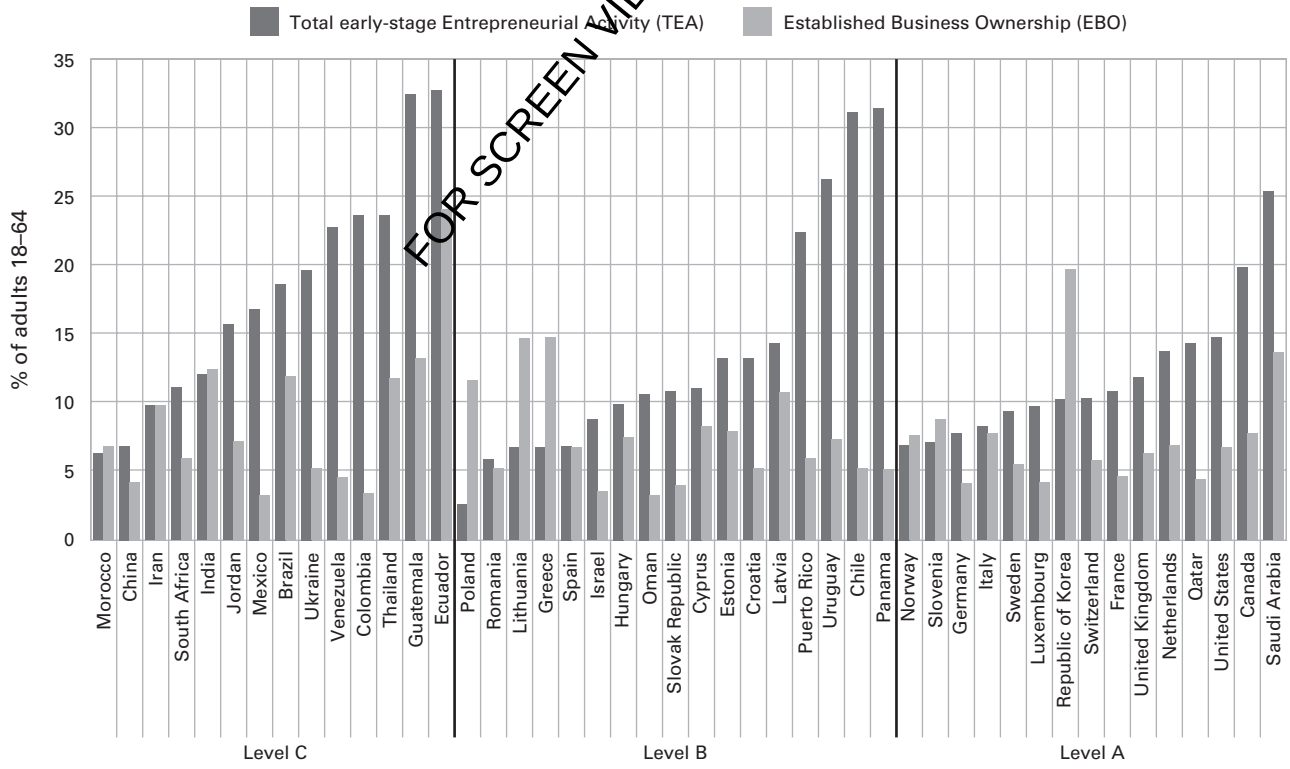

FIGURE 1.4 Total TEA and EBO as a Percentage of Adults.

Gender

Women's entrepreneurship has been growing for decades and continues to be an area of impact around the globe. In Figure 1.5, we see a gender comparison: TEA of females and TEA of males within each country survey by GEM, grouped by their different economic levels. The numbers of female entrepreneurs relative to males appears to be making a strong impact in a number of Level C countries (GDP per capita <$25,000). In China, Colombia, Ecuador, and Thailand, there are more women than men in the process of trying to start an entrepreneurial new venture. In Level B economies, Lithuania is as well! Men still dominate in most economies and it appears it is likely that more women than men will engage in entrepreneurship in lower-income countries. However, the two countries where men have the highest TEA rate relative to their female counterparts—Canada and Jordan (both 9 points higher)—come from dramatically different economies. As such, attempting to make broad generalizations based upon one GEM factor alone is not warranted. That said, overall, it is beneficial to see so many countries progressing by making opportunities available to all.

Age Distribution of Early-Stage Entrepreneurial Activity

Is entrepreneurship truly a young person's game? Are most young folks starting up late coding in someone's garage, and drinking caffeinated beverages? Yes. And no. Although entrepreneurship is often seen through the lens of the popular press as a young person's domain, the data tells a story that again supports the entrepreneurial age we live in: People of all ages across all types of economies are engaging in entrepreneurial activity. In Figure 1.6, we can see that in the majority of countries, more people under the age of 35 start businesses than those over 35. However, in the majority of countries, the rate of difference is pretty small. People of all age are engaged in entrepreneurial activity across the globe.

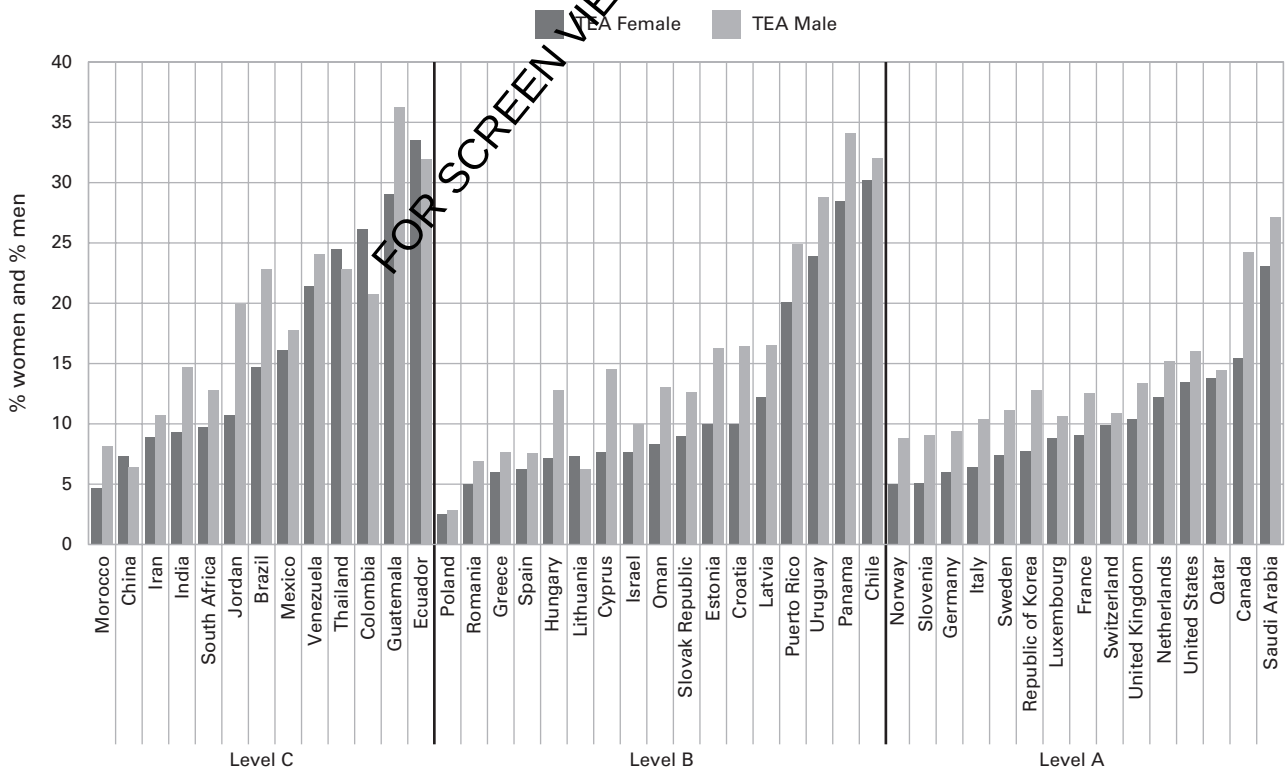

FIGURE 1.5 Comparison of TEA Female and TEA Male.

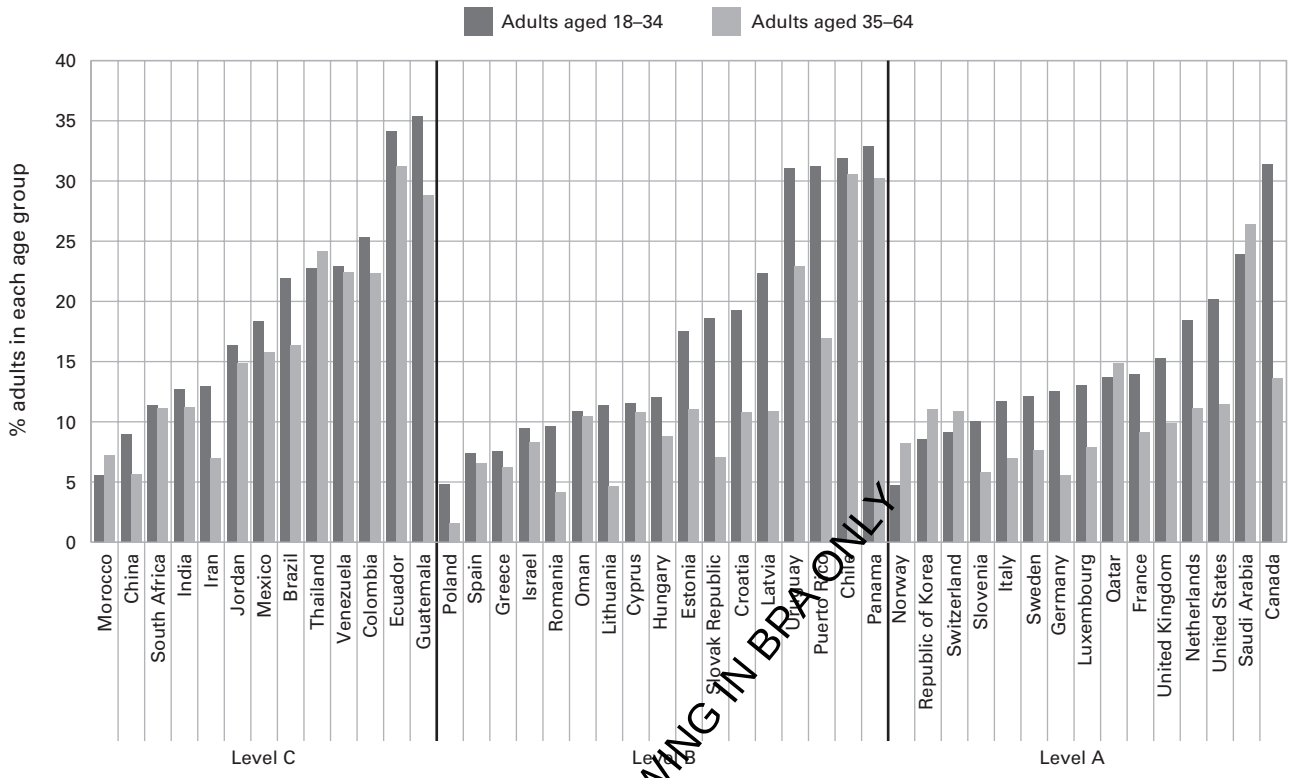

FIGURE 1.6 The Level of Total Early-Stage Entrepreneurial Activity by Adults Age 18–34 and 35–64.

Overall, this figure illustrates that the younger age group shows higher entrepreneurial activity compared to the older group in 11 Level C economies, all Level B economies, and 10 Level A economies. In many of these countries, over 30% of individuals in the younger age group were starting or running new businesses. Conversely, in Chile, Ecuador, and Panama, approximately 30% of those in the older age group were engaging in new business ventures. Survey data alone does not allow one to definitively know why rates differ by age, but it is likely due to different sociocultural factors. Regardless, it is also interesting to note that the largest absolute differences in TEA between these age groups were observed in Canada, Puerto Rico, Latvia, and the Slovak Republic. There are seven economies where younger individuals are more than twice as likely to start new businesses compared to older individuals (Romania, Lithuania, the Slovak Republic, Latvia, Poland, Germany, and Canada). As for the countries with high older entrepreneurial activity rates, it may be that they are dissatisfied with their work situations and decide to venture out on their own or that they have only now accumulated the insight, wisdom, and networks to drive an entrepreneurial opportunity to fruition.

Growth Expectations and Job Creation

The power of entrepreneurship is derived from the positive impact it makes on the lives and well-being of people—not just the entrepreneurs themselves, but individuals throughout their communities. Most directly, as entrepreneurs build their businesses, they often create jobs for others, providing a broader economic impact for their region. Simply stated, entrepreneurship is a social good. When entrepreneurs create jobs, they contribute to employment and the overall well-being in their cities, towns, and regions. While TEA rates indicate how many entrepreneurs there are in each economy, growth expectations—measured in the GEM report as job creation

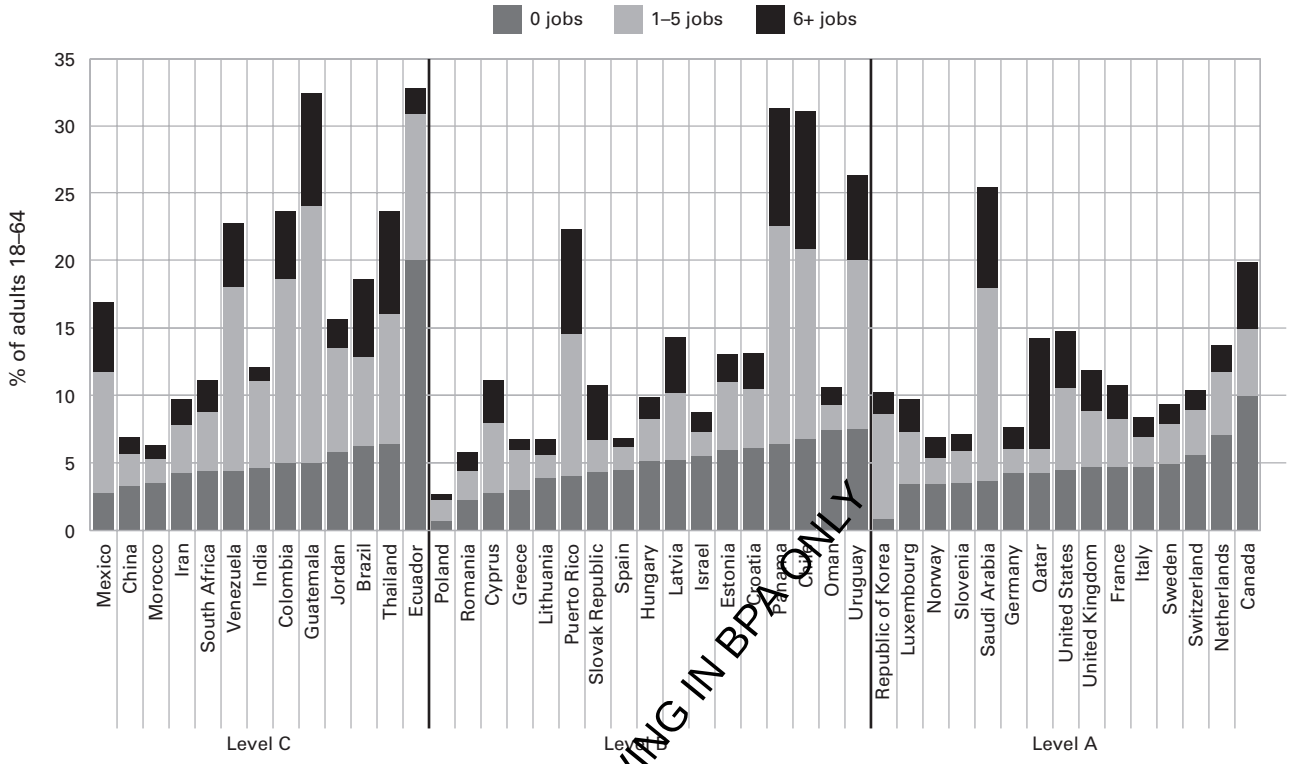

FIGURE 1.7 Job Growth Expectations Among Early-stage Entrepreneurs in the Next Five Years.

projections—represent a quality measure of this activity. Entrepreneurs differ in their growth ambitions, and this can have significant potential impact on the employment growth and competitive advantage of each economy.

Figure 1.7 shows the job creation expectations of total early-stage entrepreneurs—recall this means folks in business for less than 42 months (3 ½ years)—across each of the GEM countries. As you can see the lowest job growth expectations (in terms of the percentage of adults) were observed in Ecuador and Canada. In Ecuador, one in five adults starting or running a new business expected to employ no additional people in five years, while in Canada, this proportion was one in ten. In contrast, the highest job growth expectations were found in the Latin America and the Caribbean region. Eight out of 11 economies in this region had more than one in 20 adults starting or running a new business and expecting to employ six or more people in five years.

Analyzing job growth expectations reveals interesting patterns. As you examine Figure 1.7 for your country (or one of your ancestors) and attempt to make sense of it relative to other parts of the world, it is always prudent to remember that things may not turn out as the entrepreneurs expected. Some individuals are more optimistic than others. However, intention does matter, and to achieve growth, entrepreneurs need to first have the ambition to grow.

It is also important to note that there are many things outside of the control of the entrepreneur that impacts their ability to succeed and grow. This cautionary note regarding different factors outside the control of the individual entrepreneur that may affect their intentions to grow their business brings forward another important concept that all entrepreneurs must be aware of: the **entrepreneurial ecosystem** in which they reside. Best captured in the GEM report by the National Entrepreneurial Context Index (NECI), entrepreneurial ecosystems include different elements that support each other. Public policy, financing, laws, education, development programs, and a host of other factors come together to create an environment of support for

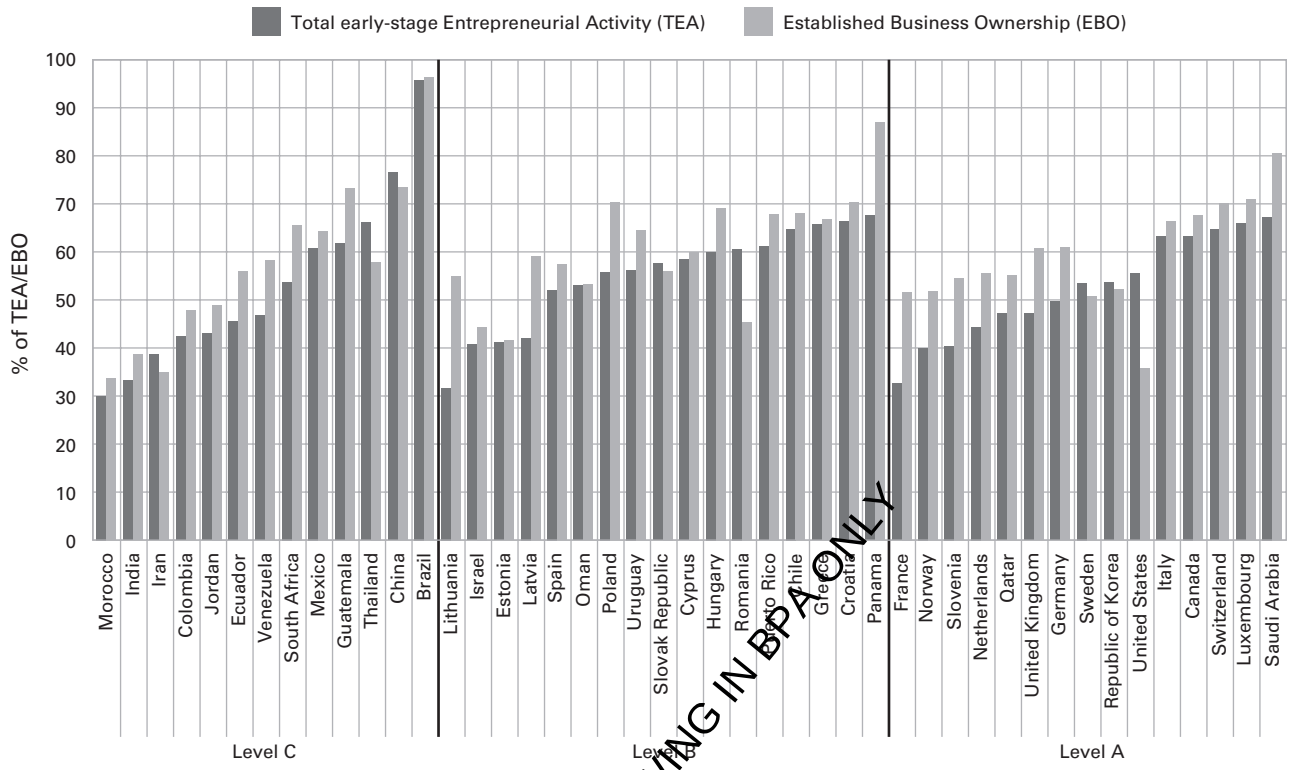

FIGURE 1.8 **The Share of New and Established Businesses Who Have Taken Steps in the Past Year to Minimize the Environmental Impact of Their Business.**

entrepreneurial activities. So as you compare and contrast the growth expectations by country remember that having a baseline of healthy conditions across all aspects of the entrepreneurial environment can dramatically impact these expectations. Researchers know that poor conditions in just a few of the overall factors can have a negative effect on the willingness and ability of people to start businesses, even those with significant strengths in other areas.

Environmental and Social Entrepreneurship

In this last section examining global entrepreneurship trends via the GEM Global report, we take a look at how entrepreneurs integrate their care for the environment and society into the building of their venture. As you can see, a majority of both those starting or running new businesses and those managing established businesses agreed that mitigating environmental impacts and maximizing the social impact of their business is important. Figures 1.8 and 1.9 show the detail by country noting that most entrepreneurs recognize that economic returns are not the only factor their business should strive for.

Specifically, entrepreneurs were asked whether they had taken any steps in the past year to minimize the environmental impacts of their businesses—such as implementing energy-saving measures or using more environmentally friendly materials. They were also asked whether the tried to maximize the social impacts of their operations by creating new jobs for young people or ensuring fair workplace conditions and wages for their suppliers. Figure 1.8 indicates that at least one in two new entrepreneurs had taken steps to minimize environmental impacts in 27 of the 45 economies. Established business owners were even more proactive, with at least one in two taking measures to reduce environmental impact in 36 of the 45 economies.

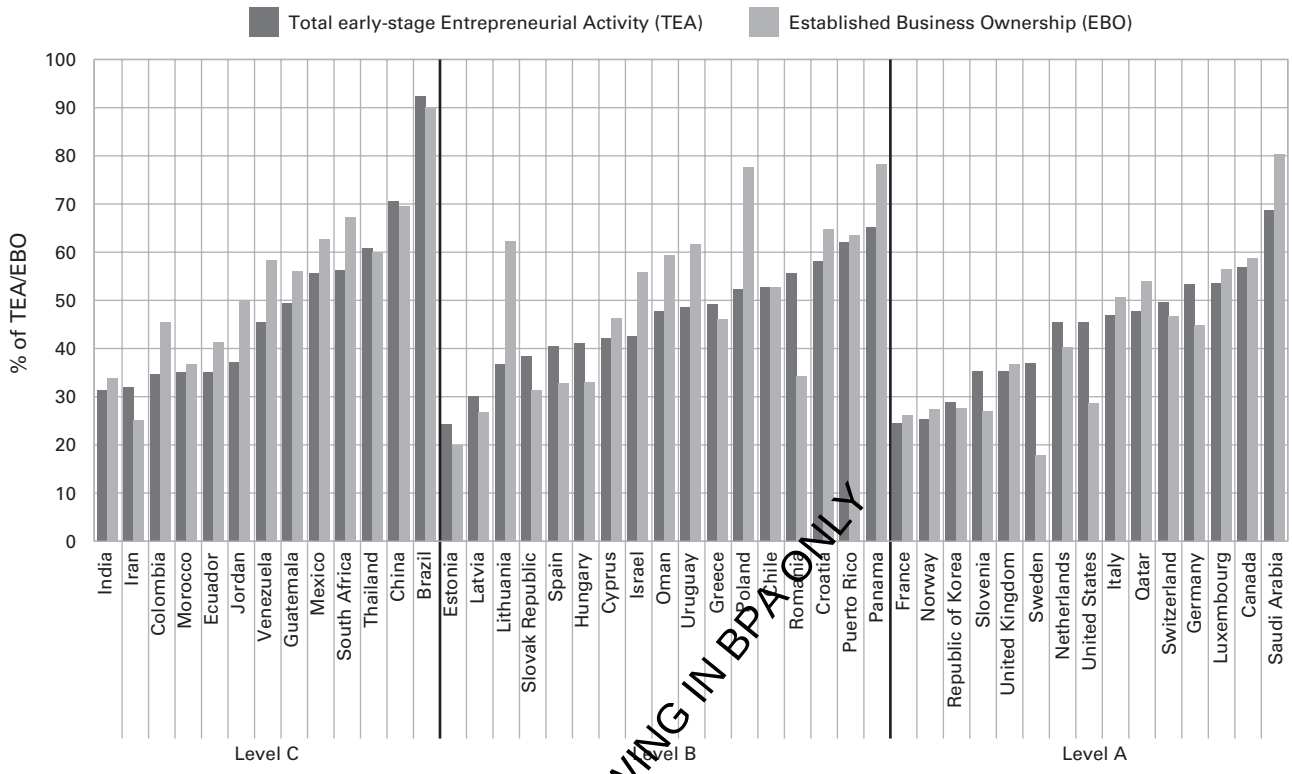

FIGURE 1.9 **The Share of New and Established Businesses Who Have Taken Steps in the Past Year to Maximize the Social Impact of Their Business.**

Figure 1.9 addresses whether entrepreneurs have taken steps to maximize social impacts, again with both new entrepreneurs and established business owners. This time, the results are more mixed; while there is widespread agreement, it is less emphatic. At least one in two new entrepreneurs had taken steps to maximize the social impact of their businesses in 15 of the 45 economies. The same was true for established business owners in 22 of the 45 economies, indicating that established business owners were somewhat more likely than new entrepreneurs to have taken steps to enhance the social impact of their businesses.

Overall, taking steps in the past year to minimize environmental impacts or maximize social impacts was more common among established entrepreneurs than new ones, possibly because new entrepreneurs are more focused on survival. More new or established entrepreneurs were taking steps to minimize environmental impact than to maximize social impact, perhaps indicating that the latter is more challenging or reflecting differences in preferences.

In summary, it is evident that many new and established entrepreneurs are not only considering their social and environmental impacts but are also taking tangible actions in response.

Entrepreneurship and Today's American Dream

As we conclude this chapter, it is important to go back to where we started: entrepreneurship can provide an opportunity for all. Notice we do not say "does" or "will" but only that it can. Perhaps, this is also a good time for those of us (the authors) who are ardent advocates for the power of entrepreneurship to remind everyone that it is not easy. However, if you want to do it, you can. It may be true that some of the necessary capabilities it takes to be an entrepreneur may

come more naturally to some folks as opposed to others. However, it can be taught, and you can learn—through practice—to shape your opportunities and the opportunities around you into a thriving new venture. With diligence and hard work, and likely some trial-and-error, you can turn your entrepreneurial dreams into reality.

In many ways, entrepreneurship is a pathway to today's American Dream. The concept of the American Dream was first coined by James Truslow Adams in 1931 as he attempted to paint a picture of the national story of the United States and what the "ordinary" American looked like "in outlook, character, and opinion.[94]" In doing so, Adams wrote about Americans dreaming about a better, happier life for all and how that could be a wonderful contribution to the welfare of the world. Soon the idiom "American Dream" became an integral part of American identity and came to mean that "*anything is possible if you want it badly enough*.[95] Sounds like a lot of entrepreneurs we know.

The American Dream is not, however, a uniquely American experience. As described above in the GEM report, millions of individuals across the globe are working hard to build new businesses for themselves and their families. Research shows many emigrate to the United States to pursue "streets of gold" where their children—especially those of poor immigrants—do better than children of U.S.-born residents.[96] As our colleague Adam Sulkowski, a Professor of Law at Babson College, shows in his book, *Extreme Entrepreneurship*, entrepreneurs start business to make a better world for themselves, whether they are in war zones, jungles, slums, or parts of the world where capitalism is illegal[96]! The "dream" is clearly not just American and thousands use the power of entrepreneurship to achieve their dreams.

Some create a business out of necessity. Others see an opportunity in the marketplace. Others tire of working for someone else. Still others are driven by a social cause and start a B-Corp. Some dream of solving a complex environmental challenge that plagues their local community, region, or the world.

What's your dream? What drives you? Let's get started!

What Is a B Corporation?

Becoming an official B Corp is one way that entrepreneurs signal that they and their firm are committing to a higher purpose beyond just running a successful business. Attaining B Corp certification is not easy. It is a rigorous and prestigious designation awarded to companies dedicated to using business as a force for good. The certification process involves a comprehensive assessment, verification, and legal commitments, ensuring that businesses remain accountable and transparent in their efforts to create a positive social and environmental impact. Successful B Corps, such as Ben & Jerry's, Etsy, and Patagonia exemplify how businesses can thrive financially while maintaining strong commitments to social and environmental goals.

CONCLUSION

In the United States and many other countries across the globe today, entrepreneurial activity now accounts for much of each nation's prosperity and its competitiveness in the global economy. The disappearance of "old" jobs, particularly in mature manufacturing industries, and their replacement by new jobs is disconcerting to workers whose jobs are threatened. Technology—whether it was "yesterday's" introduction of the Web or the possibility of what AI can bring tomorrow—marches on, and entrepreneurs stride right along with it. But society has to accept *churning*—the creation of new enterprises and the destruction of obsolete ones—because it is an important part of the foundation that has the potential to deliver a greater quality of life and lift up people everywhere.

In this chapter, we have looked at the power of entrepreneurship, its history and development, its ability to help achieve individual dreams, and the importance of entrepreneurship to national economies. In the following chapters, we will look at the specifics of how entrepreneurs start and grow their new ventures.

YOUR OPPORTUNITY JOURNAL

We are excited that you are exploring an entrepreneurial journey, one that may lead you to launch a business while in college, after graduation, or at some future point in your life. We know that all great entrepreneurs are avid readers and thinkers, and as such, we encourage you to capture some of your thoughts as you read this book. These thoughts may focus on a new venture that you are interested in creating, or they may focus more on your entrepreneurial career plan. In either event, we will close each chapter with space for you to reflect on what it means to you and your potential venture.

REFLECTION POINT	YOUR THOUGHTS. . .
1. What world changing industries do you see evolving over the next five years?	
2. What innovations or new technologies are driving these revolutionary industries?	
3. What opportunities might come from these new industries, innovations, and technologies?	
4. How does artificial intelligence impact different industries today?	
5. Can you see how artificial intelligence is affecting an industry you have worked in or want to work in?	
6. Can you see an opportunity for a new business using artificial intelligence?	
7. What skills do you need to develop to take advantage of the opportunities you see?	

WEB EXERCISE

Using your favorite AI tool (ChatGPT, Co-Pilot, etc.), input a current idea for a business that you have. Be as specific as possible and include things like where in the world you intend to start the business, your experience in the industry, and any other relevant details. Ask the AI agent to provide you the positives about starting this business and also give you a critique of concerns you might need to overcome. Use this data as one piece of input to reimagine this current opportunity.

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Case **Zoey Koko: Choosing an Alternative**

Path Forward

Sara Ferrer was passionate about helping young girls deal with the challenges of growing up. She observed that "the tween years can be difficult for many girls, when their bodies and emotions are changing lightning fast. Young girls can become dramatically less self-assured – a feeling that often follows them into adulthood." Ferrer launched Zoey Koko in 2017 on a parttime basis to produce self-care bath and body products for young girls—ages 5–12—that would boost their self-confidence and allow them to express themselves. The experience of developing Zoey Koko had been both exhilarating and frustrating. While developing her new venture, Ferrer had continued to work as an independent medical esthetician. Income from her job had sustained her financially, until in early 2020 she faced a major setback. The rapid spread of the COVID pandemic[1] caused people to minimize interactions with other human beings, resulting in a substantial decline in her esthetician appointments. Neither her esthetician job nor Zoey Koko were producing enough income to support her living expenses.

As 2020 came to a close, and with the busy holiday shopping season behind her, Ferrer reflected:

> *I can't go through another year like 2020. I'm 34 years old and I need to start the next chapter of my career, one that is financially viable and sustainable. Can I find a way to grow Zoey Koko's revenues and profits to support myself? Or should I wind down Zoey Koko and re-enter the corporate world to pursue the kind of professional job that most of my college classmates now hold? I'm going to discuss the alternatives with my advisers and my family and make my decision by the end of January 2021.*

Ferrer's Journey and Zoey Koko 2017–2020

> *I have always believed that I was destined to be an entrepreneur and to launch a venture that would allow me to pursue my passion. On the other hand, I knew I needed to be financially self-sufficient. During my senior year at Babson College, the emotional side of me wanted to pursue my entrepreneurial dream, but my practical side recognized that I needed real-world job experience and a paycheck.*

Ferrer's practical side prevailed and she opted to start her career by taking an analyst job at the TJX Companies (a leading off-price retailer of apparel and home fashions). After two years, the long days behind a computer screen coupled with a lack of satisfaction from her work as an analyst made her realize that the corporate grind wasn't for her.

Throughout her teenage and early adult years Ferrer had always loved makeup, skincare, and beauty products. She decided to turn that interest into a career and enrolled in a medical esthetician training program. Upon completion of the program, her day went from desk work at TJX to performing chemical peels, facials, and waxing at a Boston-area spa. Over the course of a decade as a medical esthetician Ferrer noticed an alarming trend in the industry. She observed that beauty treatments were promising faster and more dramatic results. Women were being fed media messages that created a 'quick fix' beauty culture, which in turn triggered negative self-talk among her female clients.[2] In 2017, she had started to question her role in providing spa services for these women. And, as she began to consider alternative market segments within which she could leverage her experience, she landed on the idea of developing bath and body products for young girls and tweens.

Ferrer explained how she had opted to target the young and tween girl market segment: "there are many brands that focus either on the under three segment or on teenagers. Zoey Koko hit the sweet spot of young and tween girls at the exact moment when retailers were starting to build out this category in their stores." With her knowledge of skincare chemistry and her commitment to safe and healthy products, she launched Zoey Koko in 2017 to develop and market bath and body products for young girls that would be safe and that would feature uplifting messaging.

During Zoey Koko's early years, Ferrer drove to hundreds of events around Massachusetts, including gymnastic tournaments, family-focused fairs, and craft shows, to sell her prototype products. In response to suggestions from her early customers,

[1] COVID-19 (coronavirus disease 2019) was a disease caused by a virus named SARS-CoV-2 and was discovered in December 2019 in Wuhan, China. It was very contagious and quickly spread around the world. By the end of 2020, the United States surpassed 20 million COVID cases and more than 346,000 deaths.

[2] When engaging in negative self-talk, an individual uses words and phrases in an internal conversation that express concerns, doubts, or negative perspectives about his or her body weight, body shape, or other aspects of appearance.

Mark P. Rice, Babson College

 This case study was prepared as the basis for classroom discussion rather than to illustrate either effective or ineffective handling of an administrative situation. The author thanks Eric Dolansky and the anonymous CRJ reviewers for their helpful suggestions, and Sara Ferrer for her assistance in developing the case study.

Ferrer launched a mobile spa party service to provide a unique and fun birthday experience for their daughters. Through her engagement in these events, and in the spa parties, she gathered feedback from hundreds of young girls and their parents, which helped her refine and perfect her products. Ferrer commented on hiring her first employees: "In 2018–2019, I recruited five women college students to work parttime on an as-needed basis, about a year after running the spa parties by myself. Initially they helped me deliver the spa parties. After COVID hit, I pivoted to having them label and ship products for me."

In early 2020, the COVID pandemic had shut down Zoey Koko's mobile spa parties, gymnastic tournaments, family-focused fairs, and craft shows. Ferrer reflected:

> *COVID created a disruption that I didn't see coming, and naturally I was feeling discouraged. However, my conversations with the mothers of my young girl customers revealed that they often shopped for novel gift ideas for their daughters at independent stores. I decided to pursue the possibility of selling to gift shops, toy stores, and kid's clothing boutiques that carried products catering to young girls.*

By opting to pursue this channel Zoey Koko avoided incurring the costs for shelf space and for the marketing spend that seeking product placement in big box stores would have required.

During the second and third quarters of 2020, Ferrer called on fifty independent store owners in New England. Darien Toy Box in Darien, CT (a toy store), Lemon Llama in Avon, CT (a kid's clothing boutique), and The Nutshell in Milton, MA (a toy store) agreed to carry Zoey Koko products. During the 2020 end-of-year holiday season, Zoey Koko generated $2000 in combined revenue from these initial three retail outlets. Frustrated with the difficulty of calling on stores one by one, Ferrer recognized that she needed guidance about how to increase Zoey Koko's sales to retail outlets. She reached out to Bill Jensen, owner of the Darien Toy Box in Connecticut. Ferrer stated that "Bill Jensen was the first retailer to carry my products and he was an enthusiastic supporter. He suggested that I try to develop a partnership with a toy sales network of manufacturers reps. He put me in touch with RBG Sales, a toy and gift sales group that covered the New England territory." If Ferrer decided to continue with the business in its current form she perceived that developing a sales rep network focused on toy stores could be a game changer for Zoey Koko. There were more than 1,800 independent toy store retail outlets in the United States.[3]

[3] "About Us." American Specialty Toy Retailing Association. (n.d.). Retrieved August 1, 2022, from https://www.astratoy.org/about-us.

Observing the rapid and widespread shift to online shopping in response to the pandemic, Ferrer decided that she should try to do something to increase her sales through online channels. In the third quarter of 2020, Ferrer paid a website designer to upgrade the ZoeyKoko.com website with a focus on improving the user experience in advance of the holiday shopping season. As the impact of the pandemic increased, she was reassured that her loyal customers continued to buy Zoey Koko products through Etsy.com, and to a lesser extent, through the Zoey Koko website. During the third quarter of 2020, Zoey Koko had also attracted the attention of Maisonette, a children's e-commerce luxury boutique. Being present on Maisonette's website for the 2020 holiday season enhanced Zoey Koko's credibility as a reputable, established brand, even though Maisonette generated minimal sales revenue. Overall, online sales as a percentage of total sales had increased from 33% in 2018–2019 to 95% in 2020. Ferrer was unsure what the increase would have been if the COVID pandemic had not caused a major shift to online shopping.

Reflecting on her first three years in business, Ferrer stated: "My first year of business was all about figuring out what I was doing. My second year was about honing my pitch and pursuing the mobile spa party market. This past year has been all about expanding my e-commerce business and getting into retail." Ferrer had been able to bootstrap the startup of her business, relying on her compensation from the spa and financial support from her parents, rather than seeking outside investment to cover startup costs and negative cash flow (see **Exhibit 1.1**). By taking no compensation for herself, Zoey Koko had been approximately breakeven. However, even though she had managed to increase revenues each year, approximately doubling them from 2018 to 2019 and from 2019 to 2020, cash flow in 2020 was only marginally positive.

Customers and Consumers

Zoey Koko faced an unusual marketing challenge in that its customer and consumer were different. The target consumers were young girls and tweens who were between five and twelve years old. Ferrer characterized them as social and tech-savvy girls who tended to participate in after school programs to help build interpersonal skills. According to Ferrer,

> *These young girls seek validation and positive affirmation from their peers. They value sparkly and colorful products as a means to express themselves and to explore their personal style and femininity. Their style is evolving, and they dabble in new trends, desiring the 'must have' fashion and accessories that their friends have. They enjoy sharing with their friends in the fun of using Zoey Koko's products.*

Exhibit 1.1 Zoey Koko Cash Flow Statement 2018–2020

	2018	2019	2020
Cash Flow from Product Sales	14,102	25,600	53,349
(y/y growth)		*1.8X*	*2.1X*
Cost of Goods Sold			
Contractors		1,450	2,321
Product Cost	7,250	12,025	15,490
eCommerce Fees	194	129	190
Packaging	784	1,536	3,356
Shipping	478	750	1,703
Cost of Goods Sold Total	8,706	15,890	23,060
(% of revenues)	*62%*	*62%*	*43%*
SG&A Expenses			
Insurance		1,740	2,160
Marketing	2,700	8,503	5,149
Office Supplies & Software	401	425	580
Computer & Internet	198	350	527
Professional Fees	1,540	4,515	7,721
Warehouse Rental		1,800	3,600
Taxes & License	50	1,200	1,709
Travel	201	152	154
Other Operating & Admin Expenses	547	451	783
Total SG&A Expenses	6,337	14,136	22,383.00
(% of revenues)	*45%*	*55%*	*42%*
Total Operating Expenses	15,040	30,026	45,443
(% of revenues)	*107%*	*117%*	*85%*
Cash Flow from Operations	–941	–4,426	7,906

Source: Provided by Ferrer.

Zoey Koko's paying customers were usually the mothers of young and tween girls, rather than the girls themselves. These women were typically working mothers, socially conscious and in their late twenties to early forties. They wanted to buy products for their daughters that contained safe, high-quality ingredients.

Over time, Ferrer had implemented a variety of approaches for staying connected with her customers. Before COVID became a public health issue in early 2020, Ferrer and her part-time college workers had engaged her customers primarily through spa parties and events. After COVID, product reviews received through her online channels became an important source of customer feedback. Ferrer also distributed Zoey Koko newsletters free to her customers.

Zoey Koko Products

> *We find that our direct competitors currently focus on either fun or safety. Our young girl consumers want products that are fun, that make them feel good and that allow them to express themselves. Their mothers, on the other hand, are more concerned with safety. They appreciate the high quality, all natural ingredients in Zoey Koko's*

products, and they like the fact that Zoey Koko's products are Made in the USA, Vegan and Cruelty Free. This is why we design Zoey Koko products to be both fun and safe.

To make her products fun for the girls, Ferrer included colorful designs and aromatic scents. The product messaging was designed to build confidence, boost creativity, and inspire imagination. Ferrer stated "one of our tag lines—'feeling smiley in your skin'—actually came from a young girl who attended one of our birthday spa parties." **Exhibit 1.2** provides a listing of Zoey Koko products by category and by percentage of revenues generated by each category; revenues by distribution channel are provided in **Exhibit 1.3**; and number of units sold in 2020 by product category are provided in **Exhibit 1.4**.

During 2020, Zoey Koko achieved over 2,500 sales to 999 customers via Etsy.com, resulting in 82% of Zoey Koko's sales revenue. Ferrer stated: "I'm thrilled that there were over four hundred 5-star reviews on Etsy." 10% of sales revenue during 2020 came through the ZoeyKoko.com website, which served 85 customers. In 2020, online sales generated a gross margin of approximately 60%, but Ferrer perceived that increasing online sales substantially would require that she invest significant additional marketing dollars. The retail store sales, which were minimal in 2020, were entirely in the three stores Ferrer had personally convinced to carry Zoey Koko products, and most of these sales occurred in the holiday season at the end of 2020. Zoey Koko's business-to-business margin was approximately 40% after paying sales rep commissions. Ferrer wondered how the percentage of sales by channel and the profit margins might change in 2021, if she decided to continue the business.

Initially Ferrer had contracted with manufacturers in China to produce her products. When her customers expressed concerns about quality control and safety, Ferrer opted to onshore production so that she could brand her products Made in

Exhibit 1.2 Percentage of Revenues as a Function of Product Category (2018–2020)

Product Category	Percentage of Revenues (2018–2020)
Bath Bombs	14%
Bubble Bars	2%
Body Butters	32%
Glitter Gels	7%
Scrubs	2%
Whipped Soaps	16%
Body Lotions	3%
Nail Polish	10%
Accessories	1%
Gift Sets	13%

Source: Zoey Koko sales records.

Exhibit 1.3 Percentages of Revenues by Sales Channel (2018–2020)

Sales Channel	Percentage of Revenues (2018–2019)	Percentage of Revenues (2020)
Events and Spa Parties	67	3
ZoeyKoko.com	2	10
Etsy.com	31	82
Maisonnette.com	0	3
Retail	0	2

Source: Zoey Koko sales records.

Exhibit 1.4 Number of units sold by product type via online channels (2020)

Product	# of Units Sold (2020)	Sales Revenue Generated ($)
Galaxy DIY Kit	401	15,089
Unicorn DIY Kit	216	8,128
Mermaid DIY Kit	301	11,350
Mermaid Dreams Gift Set	125	6125
Unicorn Kisses Gift Set	98	4802
Unicorn Body Butter	92	1400
Galaxy Galore Gift Set	75	3675
Galaxy Body Butter	51	770
Dream Chaser Bath Bomb	37	500

Source: Zoey Koko sales records.

the USA. For the production of bath bombs and bubble bars she contracted with two manufacturers, one located in Chicago and the other in Pennsylvania. For all other Zoey Koko products, Ferrer contracted with a manufacturer in Florida. Ferrer explained the fulfillment process as follows: "after receiving an order from Zoey Koko, the manufacturer ships the product to my warehouse. After labeling—if it hasn't already been done by the manufacturer—the products are packed and shipped out directly from our warehouse."

Ferrer's strategy was based on product differentiation, not low price. Her review of competing products on Etsy.com revealed that her competitors' products were typically lower-priced. The three store owners who stocked Zoey Koko confirmed that Ferrer's pricing was higher than that of her competitors, but they also confirmed that their customers were willing to pay extra for Zoey Koko's product differentiation. From 2018–2020, Zoey Koko's products were purchased primarily as gifts, due to their premium price point, and frequently as gift sets. The gift sets varied with respect to composition but typically included several Zoey Koko products, and were sold at a retail price ranging from $24.99 to $49.99. Twelve per cent of online sales were from repeat customers and the top 20% of Zoey Koko's customers accounted for 40% of its sales. Looking ahead, Ferrer hoped to develop consumable products that young and tween girls would use every day, such as body wash, shower gel and shampoo and to develop products for teen girls, hoping to retain customers after they transitioned from tweens to teens.

The market

During the startup phase, Ferrer had defined her target market as young and tween girls between the ages of five and twelve. In the United States, children between the ages of five and eleven numbered approximately 28 million, and children between twelve and fourteen numbered 12 million.[4] According to the Census Bureau, approximately 50% of the children in this demographic were girls and 50% were boys.[5]

Zoey Koko's biggest competitor in the retail store channel was I Scream, which, like Zoey Koko, appealed to mothers looking for gifts for their daughters. However, I Scream offered clothing and bags for young girls, not bath and body products. Other smaller competitors in the retail space included Musee and Da Bomb, whose bath bombs were popular; and Klee, whose makeup brand for kids did not directly compete with Zoey Koko but which was displayed in the same section of retail outlets. Within the online shopping channel, her primary competitors were Honey Butter Bath Company (2X Zoey Koko's sales volume on Etsy), Kismi Bella Handcrafter Skincare (3X), Glaze-ish (3X), PureBellisimo (6X), and Sunbasil Soap (19X). These top five online competitors offered similar product portfolios, including body butter, which was Zoey Koko's bestseller on Etsy. Her competitors were all private companies, and the limited available information about them suggested that they were relatively small. A comparison of the products of Zoey Koko and its competitors in the retail and online channels is provided in **Exhibit 1.5**.

Skincare product customers were exhibiting a growing demand for organic ingredients. As a consequence of the rising

[4] "Child Population by Age Group in the United States." Annie E. Casey Foundation Kids Count Data Center. https://datacenter.kidscount.org/data/tables/101-child-population-by-age-group#detailed/1/any/false/574,1729,37,871,870,573,869,36,868,867/62,63,64,6,4693/419,420 Updated September 2021.

[5] "National Population by Characteristics: 2020-2021." United States Census Bureau. June 30, 2022. https://www.census.gov/data/datasets/time-series/demo/popest/2020s-national-detail.html.

Exhibit 1.5 Comparison of Products of Zoey Koko and Direct Competitors

Company	Offered bath and body products	Focused on young and tween girl market segment	Emphasized health and safety in product messaging	Emphasized fun, creativity	Manufacturing: in house or outsourced?
Zoey Koko	Yes	Yes	Yes	Yes	Outsourced
Direct Competitors					
Da Bomb	Yes	No	Yes	Yes	In house
Musee	Yes	No	Yes	No	Not clear
Sunbasil Soap	Yes	No	Yes	Yes	In house
Honey Butter-Bath Company	Yes	No	Yes	No	In house
Kismi Bella	Yes	No	Yes	No	In house
Glaze-ish	Yes	No	Yes	No	In house
PureBellisimo	Yes	No	Yes	No	Not clear
Indirect Competitors					
I Scream	No	Yes	No	Yes	Outsourced
Klee	No	Yes	Yes	Yes	Not clear

Source: Comparison of company websites.

awareness of the harmful effects of chemicals and synthetic products, most consumers tended to buy products with natural or organic labeling.[6] In addition, the skincare industry had witnessed a shift of demand from older consumers to a growing younger consumer base. People were beginning to use skincare products at an increasingly young age. Also, according to Fortune Business Insights, online outlets were an increasingly important channel of distribution because of the increase in brand-specific websites, and the ease of purchasing and payment options.[8] Ferrer noted, "both my experience as an esthetician and the preferences stated by the mothers who buy Zoey Koko products resonate with the market trend toward safety. And my focus on creating products for young girls is aligned with the emerging shift toward younger consumers."

The bath and body products designed by Ferrer were competing in two market segments: (1) bath and shower; and (2) skincare. In 2020, the size of the global market for bath and shower products was $43.22B and the global bath and shower products market was projected to grow from $44.78 billion in 2021to $63.16 billion in 2028 at a Compound Annual Growth Rate (CAGR) of 5.0%.[9] In one study, the Global Skincare Products Market was valued at $140.92B in 2020 and was projected to see a CAGR of 4.69% from 2021 through 2026. In another study, sales of skincare products in 2020 amounted to $127.44B with an expected growth of 2.9% per year.[10] Ferrer commented that "the trends, size and growth rate of the bath and body products market segments are all positive for Zoey Koko."

What's Next—Persist or Exit? Time to Decide

An adviser assigned to Ferrer, by her alma mater's entrepreneurship mentoring program, had told her that one of the most difficult decisions entrepreneurs had to make occurred

[6] "Skincare Products Market – Growth, Trends, COVID_19 Impact, and Forecasts (2012-2016)." Mordor Intelligence. https://www.mordorintelligence.com/industry-reports/skincare-products-market Last accessed April 1, 2022.
[7] "Global skin care market size 2012-2025." Statista Research Department. Feb 2, 2022. https://www.statista.com/statistics/254612/global-skin-care-market-size/
[8] "U.S. skin care product sales growth via different sales channels 2017." Statista Research Department. February 2, 2022. https://www.statista.com/statistics/811368/us-skin-care-product-sales-growth-by-sales-channels/.
[9] "Beauty & Personal Care / Bath and Shower Products Market." Fortune Business Insights. June 2021. https://www.fortunebusinessinsights.com/bath-and-shower-products-market-103302.
[10] "Beauty and Personal Care Report." Statista Consumer Market Outlook. December 2021. https://www.statista.com/study/55499/cosmetics-and-personal-care/.

at times of crisis: whether to persist or to exit. At the end of 2020, Ferrer faced one of those times of crisis. If the pattern of the last three years repeated itself in 2021, Zoey Koko would continue to be financially marginal, and she would continue to receive little or no compensation for her efforts. Her medical esthetician job was no longer providing sufficient income to cover her living expenses. That, and her disillusionment with the "quick fix" beauty culture at the spa where she worked, catalyzed her desire to move on from her spa job.

Ferrer's parents encouraged her to commit fully to Zoey Koko.

Recognizing that moving past financial marginality will be one of my major challenges if I decide to continue with Zoey Koko, my parents have offered to provide up to $100,000 to support me and the growth of Zoey Koko during 2021. However, they have also indicated that they don't have the capacity to provide any additional financial support beyond 2021. Though I appreciate their encouragement and their financial commitment, I'm hesitant to accept their support unless I can convince myself that I will be able to transition Zoey Koko from survival to sustainability by the end of 2021.

If she decided to continue full-time with Zoey Koko, Ferrer believed that sourcing production to support revenue growth would not be a limiting factor for the foreseeable future. She stated that "all three of my manufacturers work with much higher-volume companies. Zoey Koko is one of their smaller customers for these suppliers. And because I have worked hard to build solid relationships with them, they have been willing to offer me favorable pricing and low minimum order requirements."

Ferrer was hopeful that working with RBG Sales would drive increased retail sales, but she had not yet closed the deal, and she didn't yet know if she would be successful in establishing relationships with sales rep networks in other regions across the United States. She was even less confident in her ability to establish a business model that would result in profitability. Ferrer stated: "I have not been proactive in managing Zoey Koko's finances. In the past, I've spent what I thought was necessary to grow Zoey Koko and hoped that at the end of the year revenues would exceed expenses. My cash flow projections for 2021, 2022 and 2023 assume that expense ratios would stay the same as in 2020. However, I'm not sure that's a good assumption," (see **Exhibit 1.6**).

Ferrer wondered what new and unanticipated expenditures she might need to make to achieve her financial projections. For example, her preliminary discussions with RBG Sales revealed that she would need to provide training for the RBG Sales representatives and product displays for the retail shop owners. She also wondered what additional marketing costs she would incur in order to achieve her projected increase in online sales. In the past Ferrer had used a basic small business accounting software package to record income and expenses. "If I decide to continue with Zoey Koko, I'm thinking an accountant could provide guidance that would help me be more effective in managing costs, but of course, the accountant's fees would be a new expense." Ferrer also anticipated that setting up contracts with sales rep networks might result in unanticipated legal expenses. Finally, she expected that growth would necessitate transitioning from her reliance on a small workforce of part-time independent contractors to hiring, training, and managing employees. "All of these uncertainties might result in costs I can't foresee. I'm guessing that I'll have to adjust the numbers in my 2021 projections based on experience. All the uncertainty about the assumptions I've made has me worried."

If I decide to continue with Zoey Koko, life is going to get more complicated. Zoey Koko will change from being a side gig to requiring a 100% commitment of my time and energy. I want to quit my esthetician job at the spa, but I need to figure out how I'll make a living. Can I do that by growing Zoey Koko? Or should I wind Zoey Koko down and pursue a full-time, professional job. I'm going to make my decision by the end of January.

Exhibit 1.6 Projected Cash Flow (2021–2023)

	2021	2022	2023
Beginning Balance		84,931	84,171
Cash Flow from Product Sales			
Retail	125,000	200,000	250,000
Online	125,000	200,000	250,000
Total Cash Flow from Product Sales	250,000	400,000	500,000
(y/y growth)	*4.7X*	*1.6X*	*1.25X*
Cost of Goods Sold			
Contractors	10,875	17,400	21,750
Product Cost	72,600	116,160	145,200
eCommerce Fees	900	1,440	1800
Packaging	15,725	25,160	31,450
Shipping	7,975	12,760	15,950
Cost of Goods Sold Total	108,075	172,920	216,150
(% of revenues)	*43%*	*43%*	*43%*
SG&A Expenses			
Insurance	10,125	16,200	20,250
Marketing	24,125	38,600	48,250
Office Supplies & Software	2,725	4,360	5,450
Computer & Internet	2,475	3,960	4,950
Professional Fees	36,175	57,880	72,350
Warehouse Rental	16,875	27,000	33,750
Taxes & License	8,000	12,800	16,000
Travel	725	1,160	1,450
Other Operating & Admin Expenses	3,675	5,880	7,350
Total SG&A Expenses	104,900	167,840	209,800
(% of revenues)	*42%*	*42%*	*42%*
Total Operating Expenses	212,975	340,760	425,900
(% of revenues)	*85%*	*85%*	*85%*
Owner Compensation	60,000	60,000	70,000
Net Cash Flow from Operations	–22,975	–760	4,050
Investment	100,000		
Ending Cash Balance	84,931	84,171	88,221

Source: Developed by Ferrer based on her 2020 cash flow statement.

Assignment/Discussion Questions

1 Thinking about the business model for her venture, identify the internal and external factors that contributed to the transition of Zoey Koko from existence (startup) to survival. Essentially, what factors and actions allow the business to survive early on?

2 Identify and assess the factors that will support or inhibit Zoey Koko's transition from the existence (survival) stage to the success (sustainability) stage.

3 Drawing on what you know, on information and insights provided in the case study; and on your answers to Questions #1 and #2, what would be your argument for sticking with Zoey Koko and attempting to transform it into a sustainable small business? What would be your argument for exiting Zoey Koko?

4 What would you do if you were Sara Ferrer: commit full-time to transitioning Zoey Koko from survival to success (sustainability), or wind down Zoey Koko and pursue a full-time, professional job? Why? What are the most compelling factors supporting each decision.