2 Innovation and Startups in Silicon Valley
An Ecosystem Approach

Modeling the Valley’s ecosystem

In order to understand and explain Silicon Valley’s long-standing performance as a global engine of innovation, entrepreneurship, and startups, I developed a model that stresses the interrelatedness of cultural and institutional factors at the micro, meso, and macro level of this high-tech region (Ester & Maas 2016: 29-41). I define Silicon Valley as a well-integrated and balanced ecosystem in which all constituting elements are lined up to promote and sustain leading-edge innovation and pioneering entrepreneurship. It is an almost organic and prototypical system that generates an enduring and resilient habitat for innovation and startups to thrive (Munroe 2009). The Valley is an environment that is built on the right cultural mindset and resource availability, which encourages and strengthens innovation and the founding of new ventures. Above all, it is an environment that stimulates a pro-innovation and entrepreneurial way of thinking that helps the creation of new businesses through a well-oiled network providing access to talent, knowledge, funding, mentoring, and legal counseling, and to accelerators. In the words of John-Seeley-Brown, the former chief scientist of Xerox, Silicon Valley is an ecosystem in which the different parts reinforce one another to create a “perpetual innovation machine”.24 It is an ecosystem that favors competition, disruptive thinking, and excellence and that supports startup teams to work on their dreams and to market their new business ideas. It is a habitat that fuels the fast growth of existing companies and has led to a booming startup economy that many other regions in the world are eager to learn from.

The ecosystem approach has proven to be a useful tool in analyzing innovation regions such as Silicon Valley (Bay Area Council Economic Institute 2012; Kenny 2000; Barami & Evans 1995; Brown & Duguid 2000; Moon Lee et al. 2000; for Europe: European Commission 2014; Startup Genome 2012, 2017; Telefónica 2013). It provides an integral and systematic insight into the characteristics that matter for regions to become and remain innovative and entrepreneurial, taking both cultural and institutional parameters into consideration (Porter 1990, 1998). The ecosystem approach, moreover,
is by nature multidisciplinary and is an instrumental aid for policymakers to assess national or regional innovation strength, entrepreneurial efficacy, and startup potency.\textsuperscript{25} By identifying the cultural and institutional preconditions that must be present for nations, regions, and cities to be innovative, competitive, and attractive for startups, the approach enables the benchmarking of startups and innovation areas at an international level. The figure below pictures the Silicon Valley Innovation and Startup Model, which distinguishes three interacting levels of this innovation and startup ecosystem interacting levels of this innovation and startup ecosystem\textsuperscript{26}.

\textbf{Figure 2.1. The Silicon Valley Innovation and Startup Model}

![Diagram of Silicon Valley Innovation and Startup Model]

Source: Ester & Maas (2016: 41)

The \textit{micro level} (center block, inner ring) specifies three main factors that relate to how expected startup success is framed in the Valley: the startup
must be based on a Big Idea that will really shake and change the market (product), the new venture must be headed by a strong team that succeeds in hiring the best and most gifted talents available (team & talent), and the founders need to be capable of timely pivoting their original startup business strategy when circumstances rapidly change (pivot & perseverance).

The *meso level* (outer blocks, inner ring) identifies four institutions that have been decisive in building up Silicon Valley’s startup ecosystem: access to ample VC new business funding; access to high-caliber universities and research centers that excel in innovation, work closely with industry, and actively promote new ventures; a government that invests in innovation and believes in a startup economy and is a launching customer of innovative products and a setter of market rules; and the presence of a strong network system of startup support agencies such as accelerators, legal counselors, and mentors.

The *macro level* (outer ring) points to the typical Silicon Valley culture that applauds entrepreneurship and shares innovation, favors the passionate pursuit of big dreams, emphasizes openness and learning, is risk prone and tolerates failure, and has the right startup frame of mind. It is a culture that impacts the other two levels as well.

The figure above outlines the three levels, the corresponding factors, as well as their interrelationships that in my view define the main cultural and institutional ingredients of how Silicon Valley became the global engine of innovative startups.

As indicated in the model, accelerators (lower center block, inner ring) are part of Silicon Valley’s advanced network support system. They help startups in their process of developing and pivoting their product and bringing it to market, they refine their business model and marketing strategy, they train founding teams and their skill sets, they offer access to funding, they assist them in getting their first customers and sales, and they provide a zesty accelerator startup culture. The model underlines the major role that accelerators play in Silicon Valley in launching startups.

Once again, it must be emphasized that it has taken Silicon Valley many decades to develop this well-functioning system and that its success is based on the intelligent combination of all of the ecosystem’s constitutive features. The sum of the Silicon Valley ecosystem is more than its parts. This axiom illustrates again that selective cherry picking will not work in an attempt to replicate Silicon Valley’s success elsewhere in the world. It is, simply said, all or nothing.
The model in more detail

The business anatomy of Silicon Valley is dominated by a unique combination of a pro-innovation and pro-startup culture and the prevalence of institutions that help new ventures to excel. In this chapter, I take a closer look at these cultural and institutional factors by describing and examining the different micro, meso, and macro levels of the Silicon Valley innovation and startup model. This context information will help to clarify the specific role and position of accelerators in the Silicon Valley ecosystem. The chapter attempts to give a broad overview of the way the Silicon Valley ecosystem functions, which will facilitate our understanding of how accelerators contribute to this self-reinforcing system. I begin with the micro level by exploring the way that innovation works in Silicon Valley, the necessary startup alignment of upstream and downstream innovation, the emphasis on disruptive innovation, the importance of strong startup teams, and the need for timely product pivoting by startups.

The micro level: Product, people, and pivot

Product: “Think big”

“Think big” is at the top of Silicon Valley’s canon of innovation. Its mainstream business model is all about scale, the ambition to reach large markets, and the desire to have a social impact. Although “small is beautiful” is a philosophy and movement with Californian roots, it is definitely not how the Valley sees innovation and entrepreneurship. The very essence of high tech is that it is not limited by geographical boundaries such as regional or national home markets. As Marc Andreessen, one of the Valley’s most reputable VCs, once said: “software is eating the world”. The Silicon Valley business model is based on scalability, preferably at the global level. The enormous success of high-tech companies such as Apple, Google, LinkedIn, Twitter, WhatsApp, Instagram, etc. can be attributed to the fact that their products service markets in virtually all corners of the world. Their market is not the Valley, not California, not even the U.S. – their market is the world. They are global brands with global customers, and with global impact. Scalability is what startups are evaluated on by investors; it is their prime funding criterion. “It’s all about scale for VCs,” according to Silicon Valley investor Marc Philips (2013: 15). And startups for their part know that they are being assessed in terms of their product scalability. There is not much sense for startups being in Silicon Valley with a product that is hardly scalable (or duplicable) and that is restricted
to quantitatively limited markets. Their prospects for funding are meager, if not non-existent.

Related to scale is the need for fast startup growth: entrepreneurs need to launch a scalable product that will quickly sell to sizeable volumes of customers. VCs constantly search for early-stage startups that develop products that combine scalability and fast growth. Silicon Valley unicorns such as Airbnb, Palantir, Dropbox, Uber, Pinterest, and WhatsApp all share these two fundamental success qualities: they reach substantial global customer segments and they have fast growth records. Accelerators, as I will conclude, are particularly keen on launching startups with scalability and growth potential. It is a vital part of their startup recruitment procedure and training program. It opens access to investors in their continuous search for the Next Big Thing, i.e. innovations beyond Google, Apple, or Facebook that will revolutionize the technological landscape and herald a new paradigm shift as well as mass markets, of course.

Scale and growth are key, but so is the innovation mission: the need to have a social impact and to offer practical solutions to pressing social issues. The Silicon Valley vocabulary overflows with phrases that grasp this fundamental ambition of startups to develop technologies “that will change the world” – not a very humble ambition but definitely one that dominates the Silicon Valley startup jargon. It is also sometimes called the “big hairy audacious goal”. Apple founder Steve Jobs probably set the stage for this with his legendary statement: “we’re here to put a dent in the universe”. In pitching their product, Silicon Valley startups typically incorporate this mission-driven mantra of making the world a better place, though sometimes to the point of near meaninglessness. They know they should not settle for less and that the bar is raised high.29

The call to “think big” is a chronic part of the Silicon Valley narrative, indicated by its emphasis on scale, growth, and impact. But there is another dimension to this narrative: “think disruptive”. The history of Silicon Valley is a history of disruptive technological breakthroughs, of Schumpeterian creative destruction.30 These are technological changes that have radically transformed markets and playing fields, disruptive innovations that have redefined ruling technologies, outperformed existing markets, and attracted new consumer segments (Christensen 1997; Moore 2014). These innovations have shaken up the status quo, allowing new business models to emerge that drastically altered prevailing market relations. Uber shook up the taxi market, Airbnb upset the hotel market, Skype and WhatsApp disrupted the phone market, Amazon disturbed the book market, eBay changed the shopping market, and Spotify was a bomb under the CD market. And some
decades earlier, the PC became a major competitor for expensive mainframe computers and totally broke up the computer hardware market and later also the software market. Disruptive innovation is in Silicon Valley’s veins. It reshapes markets, introduces new competitors, and creates a significant impact. The Valley has embraced the idea of disruptive innovation to a nearly messianic degree, supported by its series of conferences, events, and meetings that celebrate disruptive innovation and its many merits. Various accelerators, as we will see, explicitly aim for disruptive innovation.

Silicon Valley lives off innovation. Bringing to market new technologies, new products, and new software and hardware is the quintessence of its existence. “Think innovation” is the backbone of the Valley.Entrepreneurial innovativeness and innovative entrepreneurship are bearers of the Silicon Valley narrative. Startups play a crucial role in this narrative, as they are pioneers in the innovation trajectory and in the commercialization of new technologies, products, and services. They are frontrunners, and as the new generation of business innovators, they challenge existing high-tech companies and dominant market positions. As new ventures, they are essential links in the chain of disruptive innovations.

People: Team and talent
Founding a startup is no small thing. Team, talent, and persistent optimism are absolutely indispensable in building a strong startup. It takes a lot to start a new business. Startup entrepreneurs must turn their business idea into a viable and competitive product, do the market math, secure funding, attract customers, develop a marketing strategy, structure the organization, hire and coach talent, and take timely decisions to pivot. Apart from serial entrepreneurs, startup founders tend to lack an entrepreneurial skill set based on prior business experience, but somehow they must survive in a mega-competitive environment of thousands of new ventures that all aim high, all want to make a difference, and all want a piece of the market pie. Founders need to cope with such daily hurdles as cash flow control, customer problems, technical product failures, and personnel issues. They must struggle with failure and address numerous challenges both instantaneously and simultaneously. As Noam Wasserman (2012: 6), professor of clinical entrepreneurship at the University of Southern California and author of the seminal work *The Founder’s Dilemmas*, puts it: Perhaps no business pursuit is messier than creating an organization from scratch.”

Startup life is a turbulent roller-coaster ride. And there is no guarantee for success. Startups are by definition vulnerable ventures, and survival in most cases is questionable. It takes guts, passion, perseverance, and a good
deal of luck to maneuver a startup to its next stage, out of the danger zone. Startup founders have to live with manifold frustrations – e.g., an often rigorous career break, the permanent search for additional funding, the likelihood of having to drastically change the startup business model – and they must have the mental strength and energy to face a highly uncertain future. Startup founders need to anticipate basic business dilemmas, avoid sneaky pitfalls, take calculated risks, and cope with chaos, ambiguity, and unpredictability. They must be willing to put in long hours, to live on a minimal income, to accept painful mistakes, and to deal with pressure from family and peer groups.

Startup life is no walk in the park, that much is certain. Accelerators’ role in making the walk easier should not be overestimated, but they can help in addressing startup impasses and problems in a more structured way.

There seems to be a growing general consensus in Silicon Valley that startups need a team of founders rather than solo entrepreneurs. Teams are generally better equipped to meet startup dilemmas (Wasserman 2012). Only strong teams will win, so runs the prevailing new venture leadership diagnosis. I attended a closed Silicon Valley investor meeting in which startups pitched for angel funding, and the main criterion used by investors was whether the new business was led by a strong team of passionate founders with convincing entrepreneurial competences, the right mindset, synergy, and determination. For that matter, solo founders were not even taken into consideration for funding. The focus on teams accentuates how important complementary skill sets of startup founder teams are considered (Cohan 2012; Lazear 2004; Lewis 2012; Szycher 2015).33

Teams need to have the right mix of product development knowhow (upstream innovation) and product marketing and sales abilities (downstream innovation). In his review of entrepreneurial teams, Thomas Lechler (2001: 276) concludes that “overall the main argument for the advantage of teams is based on the positive effect of a combination of people with different personalities, characteristics, knowledge, skills, and abilities.” Startup founder teams are good for emotional support, for sharing and handling business setbacks, for bringing in other perspectives, for adding realism, and for filling skill gaps. One could also point to the wider psychological significance of the startup team’s mission. As Katzenbach & Smith (1993: 178) argue: “credible team purposes have an element related to winning, being first, revolutionizing, or being on the cutting edge.”

Startup teams need to be goal-driven and achievement-oriented, focused on the development and marketing of innovations, and making use of the experience, expertise, and skills of team members. Effective
startup founding teams have at their disposal collective resources that can be mobilized to guide a startup through its demanding first phases. These team resources go above and beyond team members' individual competences. Some team members are good in the technicalities of product development, some excel in marketing, and others know how to set up the startup as a business organization. Startup teams that lack these resources and complementary skills are doomed to fail. Research has shown that the malfunctioning of startup teams is among the main reasons why startups go down (Wasserman 2012). Weak teams will lose. Team building, therefore, is a common activity in accelerator programs.

Talent is Silicon Valley’s main resource. This is true for both existing high-tech companies and for startups. Its talented workforce is the trademark of the Valley, which enables its continual development of innovative technologies. Talent is a startup’s human capital and is responsible for its innovation record, business performance, and growth potential. Surrounded by some of the best universities in the world, Silicon Valley has direct access to a large and renewable pool of talents. Silicon Valley thrives on talented software programmers, coders, engineers, and computer scientists. They are the cement of the Valley as a perpetual and self-reinforcing innovation machine. Talented employees are of paramount importance in the innovation chain from idea generation – via idea elaboration – to marketable new products and services.

A flourishing high-tech startup economy is unthinkable without a highly educated and highly skilled workforce. But high-tech talent Silicon-Valley style is not just about excellence in hard skills such as coding, programming or hardware design. Talent also comes down to outstanding soft skills: creativity, flexibility, curiosity, passion, an orientation towards achievement, the ability to work in teams, openness, a willingness to share, an entrepreneurial mindset, a pro-customer attitude, being good at networking, being willing to learn, and being focused on personal development. Talent, in other words, is about combining hard and soft skills. And it is this combination that makes the difference in an innovation economy. Sometimes bigger companies acquire a startup not because of its product or technology but because of its talent, its team skills – a phenomenon also known as 'acqui-hire'.

Working for a startup is unpredictable and non-routine. Job descriptions are meaningless. “Working for an early-stage startup requires figuring out what your job should be every day, how to accomplish things that have never been done before and when you should throw out everything that’s already been done and start over.”(COMPASS 2015: 17). High-tech Silicon Valley
corporates are involved in a constant struggle to recruit the best talent, and job offers reflect this rugged competition in terms of generous salaries, stock options, employee benefits, and company perks. Employer brand, identity, and culture are also major elements in the way talents evaluate prospective high-tech employers. Laszlo Bock (2015), head of people operations at Google, gives an interesting insight into how this Silicon Valley high-tech giant (which receives over two million applications a year) recruits talent and how it remains a talent powerhouse. His basic work rule regarding hiring talent is: “You want them to fall in love with you” (Block 2015: 97). But love must be mutual. As Facebook CEO Mark Zuckerberg states: “I will only hire someone to work directly for me if I would work for that person.”

It is far from easy for startups to compete with high-tech corporates in the Valley in hiring top talents. They cannot offer the same salaries, benefits, and perks. Junior software engineers, for instance, may already start with an annual salary of $100,000 (stock options and bonuses not included). Startups therefore need to approach talent recruitment using different unique selling points: they primarily depend on applicants’ drive to stand out in a hectic and dynamic work environment and their desire to share the excitement and satisfaction that growing a startup gives. They target those who enjoy working in a small company and in a small team and who relish the idea of personally contributing to a startup’s mission and passion. In short, they seek out talent that is passionate about having an impact in their job, even if it is their first job.

**Pivot**

Startups fuel the rejuvenation and revitalization of mainstream business developments as they come up with new solutions to pressing problems. But it is a role that takes much effort, pain, and sweat. Most startups fail. The main test is to find a balance between upstream innovation (from idea to product) and downstream innovation (from product to market). Product ideas may be brilliant, but the failure to valorize is the end of every startup. This balance is especially urgent after the first round of funding (‘the valley of death’), when startups quickly approach the end of their financial runway (Philips 2013). Not finding a responsive market is disastrous for startups. The difference between failing and pulling through can boil down to how and when a startup decides to launch its product in the market. Value creation, market entry, and product acceptance is what startups are all about. Every startup founding team struggles with aligning upstream and downstream innovation (Bauwen 2012, 2013). It is the alpha and omega of startup life. Or as Ruben Daniëls, Silicon Valley startup founder, neatly summarized:
“A startup is a vessel to find a business model around the technology you are developing.”36

Bringing a startup product successfully to market is a tedious job. First-time startup founders often lack the skill set and experience to make an effective transition from idea to market. Accelerators can be very instrumental in helping startup teams to find their way through the numerous pitfalls of commercialization. Mentorship by experienced serial entrepreneurs can prevent startup founders from making the most common business development mistakes.

Pivoting is a matter of life or death for startups in their effort to survive the early stages as new ventures. It is an important buzzword in the Silicon Valley business glossary. Pivoting directly affects the necessity of balancing upstream and downstream innovation. Endless product polishing is sure to result in startup death, as its funding runway tends to be much too short. Startup founders, to paraphrase renowned Silicon Valley entrepreneurs and authors Reid Hoffman and Ben Casnocha, need to be in “permanent beta”.37 To timely pivot one’s business concept should be the prevailing startup logic. “Fail fast”, so the Silicon Valley acclaimed motto goes, as that would be better than spending endless amounts of time on product refinement under uncertain conditions of market interest.

This line of thought is convincingly argued by Eric Ries, noted Silicon Valley entrepreneur and author, in The Lean Startup (2011). The book is an authoritative combination of analytical guidelines, methodological templates, and practical principles that go beyond startup founders’ entrepreneurial instincts. It is clearly one of the most popular books among starting entrepreneurs. The number one insight that Ries puts forth is that “learning is the essential unit for startups” (2011: 49). His Lean Startup Model is based on what is called the Build-Measure-Learn feedback loop. This analytic tool comes down to building a minimum viable product (MVP) with the lowest amount of time, money, and effort. As quickly as possible, the startup team needs to launch the product and meticulously measure basics such as customer reaction, traction profiles, product use, and willingness to pay. This feedback information is used for immediate product alterations and business plan changes. The secret is not to endlessly polish and re-polish a product but to market the product in its early stage, to monitor customer take-up and feedback, and to process this information through pivoting product adjustments. “If we’re not moving the drivers of our business model, we’re not making progress. That becomes a sure sign that it’s time to pivot.” (ibid.:120).

Within a remarkably short period, the term “pivot” became a leading concept in Silicon Valley’s startup vocabulary. The merits of Ries’ approach
are twofold. First, it is counterintuitive. The idea is not to develop the perfect product, because if that fails it will surely mark the end of the startup given that it was simply incapable of meeting consumers' needs. The idea is to quickly launch an MVP and use customer reaction to change the initial product and to make a better product-market fit. While the MVP is still full of bugs, it is shipped to customers way before it is market-ready in traditional business terms. For strongly product-driven startup entrepreneurs, pivoting is often an agonizing experience – a nightmare, even – as they believe in their product and because it took great perseverance to build it. The pain is not so much in building the MVP but in not building the ideal product. Fortunately, Ries offers a variety of practical suggestions on how and when to pivot. The second merit of his approach is the emphasis on solid quantitative measurements of customer feedback and product use. Ries' methodology is firmly data-based, and collecting primary metrics on customer response and take-up is seen as a startup's core activity.

The need to pivot is based on a commitment to iterations that is being fed by repeated MVP testing, customer accounting, product alteration experimentation, progress measuring – or, as Ries calls it, "validated learning" (ibid.: 18-19). Startups operate under conditions of extreme uncertainty, and the trick is to make the right choice between persisting or pivoting, between continuing on the current path or making a sharp turn.38 Effective pivoting mirrors startups' resilience and agility. It takes guts to pivot, and the principle of validated learning may improve a startup's survival chances. One of the distinct roles of accelerators, as will become clear, is helping startups with timely pivoting, as this is what makes or breaks a startup.

The meso level: Capital, universities, government, and support networks

The Silicon Valley ecosystem facilitates startup founders in building their new businesses through an advanced network of institutional facilitators and resources: angel and VC investors (startup funding), universities and research centers (talent pool and knowledge), government (innovation policy, technology funding, visa), and the startup support infrastructure (accelerators, legal advice). I briefly outline how these institutional pillars of the Silicon Valley ecosystem have enabled the region to become and remain the global epicenter of innovation and high-tech startups.
Startup funding: Angels and VCs
Funding, obviously, is of paramount significance for startups. Or, in the more prosaic words of Silicon Valley analyst Tapan Munroe: “Ideas are the soul of innovation, money is the life blood.” (2009: 72). Money from friends, family, and fools is a welcome but also a vulnerable source of startup financing. Access to professional investors – i.e., to angel and VC funding – is another pillar of Silicon Valley’s advanced ecosystem. Crowdfunding is becoming more important, too. Startup funding has been around for a long time in the Valley and has indisputably added to the strength of its innovation economy and new venture entrepreneurship. Recent data show that half of all U.S. venture capital is invested in Silicon Valley companies, more than all other U.S. regions combined.\(^3\) The Valley even attracts over 15% of total *global* VC funding. No other region in the world captures such a high share of domestic and foreign venture capital. Between 2009 and 2014, VC firms invested over $31 billion in Silicon Valley companies.\(^4\) Particularly relevant sectors are software, biotechnology, clean technology, and health.

Sand Hill Road in Menlo Park is a legendary address, as it houses the highest concentration of prominent VC companies. One of them is Sequoia Capital, founded in 1972 and among the most well-known VC firms, having funded such illustrious high-tech companies as Apple, Atari, Cisco, Oracle, Google, Yahoo, YouTube, LinkedIn, PayPal, WhatsApp, Airbnb, and Instagram. The total funds raised by Sequoia amount to $4.12 billion; and it has overseen 57 IPOs, 170 acquisitions, and 1,235 investments in almost 700 companies.\(^4\) In 2014, it participated in the selling of WhatsApp to Facebook for a staggering $19 billion, which made it the largest acquisition in the history of a venture-backed company at the time. Kleiner, Perkins, Caufield & Byers (KPCB), whose offices are next door to Sequoia on Sand Hill Road, is another major Silicon Valley VC (also founded in 1972) with $2.68 billion of funds raised, 41 IPOs, 112 acquisitions, and 836 investments in over 450 companies.\(^4\) KPCB was involved in funding AOL, Citrix, Compaq, Lotus, Symantec, Genentech, Zynga, Amazon, and Twitter, to name just a few companies. These figures on funding and exits substantiate CB Insights’ conclusion that “it is clear that the Silicon Valley tech hub is the 800 lb. gorilla when it comes to both venture-backed tech financing and exit activity.”\(^4\) Other premium Silicon Valley VC funds include Andreessen & Horowitz, Benchmark Ventures, Khosla Ventures, New Enterprise Associates, Accel, and Greylock.

Public and private pension funds, university endowments, and foundations are among the largest U.S. institutional VC funders. Commercial banks play a minor role. Former banker John Dean has a straightforward
The prevailing culture of banks, particularly large ones, is risk-aversive; it isn’t quite suited to the freewheeling, risk-embracing ethos of Silicon Valley.” The investment logic of banks and VCs differs markedly.

Venture capital is big in Silicon Valley, but so is startup funding demand. It takes serious capital to run a startup, and there are thousands of Silicon Valley startups competing for funding, among them a large cohort of non-U.S. startups that settle in the Valley to raise VC funding. Building and growing a startup in Silicon Valley is expensive, as the cost of living is high and recruiting highly skilled staff is very costly. A startup’s financial runway is short, and its cash burn rate is generally high. Most startups do not succeed in raising sufficient capital to grow their business. The majority fails, and only the best survive. Silicon Valley’s definition of ‘the best’, as I outlined above, is based on two criteria: scalability and growth potential. That is why VCs are more interested in later-stage funding, when startups have matured and are able to show market traction. VCs are predominantly looking for what they call a ‘hockey stick’ growth curve: a revenue curve that takes an initial linear (slow) growth rate but then suddenly turns into an exponential (much faster) growth curve (Philips 2013). The mobile devices and apps sectors are big game changers in this respect.

VC investments are high-risk investments, and VCs consequently aim for high returns on their money. One big winner compensates for the losses on many other startup investments. VC startup investment math is not rocket science, is highly intuitive, and according to Forbes contributor Bruce Booth, “a big part of the problem is that anecdotal stories about great returns drive much of the thinking.” Only successful startups will survive; the ones that fail but also received funding simply disappear from the radar. Picking a winner remains the greatest VC challenge, as is keeping the valuation of fast-growing businesses realistic given the recent fear of an implosion of overpriced and overhyped unicorn startups (CB Insights 2016; Wadhwa 2016). VCs are also competitors in the sense that they are all searching for the next startup champion, the one that will generate their multiple returns on investment (ROI). It could create an investors’ tragedy of the commons. The fear of missing out –commonly abbreviated as FOMO –may override a VC’s fear of losing money, as Silicon Valley investor Bill Gurley, partner at Benchmark, has warned.

How does the VC business work? Investments in new ventures begin with a pre-seed stage (family, friends) and move on to the seed stage, the early stage, the expansion stage, and later stages. In technical terms, these stages are known as series Seed, series A, series B, series C, series D+. The
more mature the startup stage, the higher the VC investment – depending, of course, on the startup’s capital intensity and valuation. Series Seed is the stage in which ideas and products are developed; the funding of this stage is typically between $250,000 and $750,000. Series A is about optimizing product and user base; the funding at this stage ranges between $3 million and $6 million. Series B is for expanding market reach; the funding varies between $6 million to more than $15 million. Series C and later is used for scaling; funding ranges from single digits and double digits to hundreds of millions, or even billions. Uber raised over $10 billion (series G), and Airbnb over $3.4 billion (series F). The later the investment stage, the more important the hockey stick return on investment calculus becomes. Huge investments are at stake. Series C, D, and E are later-stage investments that are usually aimed at working towards an exit, either via a trade sale or an IPO. VCs demand a greater say in these later investment rounds, which may involve drastic changes in the startup team, as growing a startup requires different skills than launching a startup.

Angel investors are more active in early-stage startup funding. They typically are successful former entrepreneurs with considerable business experience and extensive networks who like to invest their private money in startups. Angels are appreciated by startup founders for providing them with ‘smart money’: the combination of cash, expertise, experience, time, mentorship, and valuable contacts and networks. This is probably the greatest advantage of the Silicon Valley funding support system. Investing in startups is not simply a matter of providing capital (‘dumb money’) to lengthen a new venture’s runway. It is also a matter of investing smart money, and many startup founders will admit that this helped enormously to make them stronger and to bring their new business to the next level. Smart money counts.

Silicon Valley accelerators have strong relationships with VCs; there is a clear understanding of mutual dependency and shared benefits. Accelerators bring VCs into contact with promising startups, and VCs get direct access to startup teams they may want to invest in. And in many cases, accelerators are backed by VC funds, which permit an even more direct role and active participation.

Talent pool and knowledge: Universities and research labs
Higher education is an indispensable institution in an advanced pro-innovation and pro-startup ecosystem. Surrounded by some of the best universities and research labs in the world, Silicon Valley has a gold mine of talent, innovation, and knowledge. The Bay Area is home to the University
of California with its four campuses (Berkeley, San Francisco, Davis, and Santa Cruz), Stanford University in the heart of Silicon Valley (Palo Alto), California State University with its two campuses (San Francisco and San Jose), and Santa Clara University.49

Berkeley (a public university) and Stanford (a private university) are two of the most renowned institutions for higher learning inside and outside the U.S., and both top all major national and international academic rankings. No less than 29 Nobel prizes have been awarded to Berkeley alumni, while Stanford has 32 faculty members who have received this most prestigious academic honor. Altogether, the Bay Area universities enroll about 175,000 students, a quarter of whom are graduate students. The area is furthermore served by a widely branched network of California Community Colleges, which are core feeders of the region’s universities. The Foothill-De Anza Community College District, located in central Silicon Valley, enrolls about 65,000 students (one of whom was Steve Jobs). Such large numbers of students provide a continuous and abundant supply of highly skilled talent that Silicon Valley’s high-tech firms and startups are eager to recruit from. The Bay Area universities provide outstanding training at all educational levels. Moreover, they coach thousands of PhD students working on specialized dissertation projects that add to their educational excellence and state-of-the-art research quality. The great reputation of the Bay Area’s universities means that they are able to hire the best and brightest academics, which further strengthens educational and research quality. The Bay Area is a magnet for not only startup founders but also students and academics.

But the area’s innovation ecosystem is not just tied to universities. There are numerous public and private, independent and corporate, federal and state R&D institutes and labs that all add to the innovation standing of this premier high-tech region. Some of the more well-known of these are Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratories, SLAC National Accelerator Laboratory, NASA Ames Research Center, Joint Genome Institute, SRI International, PARC, California Institute for Regenerative Medicine, Buck Institute for Research on Ageing, Ernest Gallo Clinic and Research Center, Joint BioEnergy Institute, and, of course, the various corporate in-house R&D laboratories (Bay Area Council 2012). These exceptional universities, research institutes, and laboratories attract the best researchers from all over the world and pull in substantial external innovation and research funds. For academics in the top league, the Bay Area cannot be matched in terms of its innovation environment, providing them with a place to pursue their career, work with their peers, teach smart and dedicated students,
and enjoy the challenge of a competitive ambiance. And to top it all off, the weather is not bad either.

The Silicon Valley innovation and startup ecosystem goes beyond the mere existence of world-class universities and extends to the way universities collaborate with high-tech industry and encourage entrepreneurship among its faculty and students. One thing the Bay Area universities cannot be accused of is being focused on ivory-tower research. For decades, they have had a strong entrepreneurial mindset and have developed close cooperative relationships with industry. The commercialization of research output is high on the universities’ agenda, which underlines the role of applied knowledge, of finding innovative solutions to practical problems, and of working together with industrial stakeholders. This symbiotic university-industry collaboration is highly cherished. Industry participates in the university, and universities for their part reach out to industry. As Emilio Castilla et al. (2000: 229) conclude: “The educational sector has been especially vital because the constant movement back and forth between industry and university has blurred the boundaries of both and created elaborate social networks that keep academic research focused on practical problems, and infuse industrial activity with up-to-date science.” Professors are stimulated to valorize their research on innovations, and universities often have special arrangements for faculty and students to launch their own startups. A legendary Stanford example is Hewlett-Packard, which was founded by two Stanford graduates in the late 1930s and coached by the brilliant Stanford Dean Frederick Terman. Hewlett-Packard has since grown into an electronics behemoth with over 300,000 employees and revenues of more than $110 billion.50

Bay Area universities encourage the founding of startups, and the record of accomplishment is remarkable. Pioneering startups that were founded by Berkeley graduates and alumni include great names such as Intel, Apple, Sybase, Oracle, Sun Microsystems, Gap, and early biotechnology companies such as Chiron Corporation, Tularik, Exelixis, and Renovis. Calculations show that companies founded by Berkeley faculty, graduates, and alumni employ over half a million people and have annual revenues over $315 billion.51 Since 1990, over 145 new ventures have been launched under the umbrella of Berkeley’s IP licenses. SkyDeck is Berkeley’s first startup accelerator, located in a 10,000 square-foot space. It works with corporate partners and has launched over 70 startups.52

Stanford can also pride itself on a fabulous startup history. Eesley & Miller (2012) have calculated that almost 40,000 active companies are Stanford spinoffs, which together produce annual revenues of $2.7
trillion and 5.4 million jobs. Among them are illustrious companies such as Hewlett-Packard, Google, Nike, Cisco, Sun, Yahoo, VMware, PayPal, LinkedIn, Netflix, and Tesla. The authors conclude that “if these companies collectively formed an independent nation, its estimated economy would be the world’s 10th largest.” (ibid.: 7). The economic, social, and cultural impact of companies started by Stanford faculty, students, and alumni goes beyond the imagination. In 2010, the top 150 Silicon Valley companies that were Stanford-affiliated had a total market capitalization of $650 billion and sales totaling about $270 billion.53

Both Stanford and Berkeley promote startup founding through a wide array of resources, services, and networks: student mentoring and coaching; access to funding, patents and IPs; technology licensing; financial faculty incentives; special entrepreneurship courses; incubators and accelerators; extracurricular programs; leadership and team training; strategy and pivoting courses; internships at the Valley’s high-tech corporates; and startup innovation and funding competitions (Ester & Maas 2016: 145-154). Berkeley, for instance, is known for its Haas School of Business entrepreneurship programs and the Fung Institute for Engineering Leadership. Stanford excels through its Stanford Technology Ventures Program (STVP), which focuses on the acceleration of high-tech entrepreneurship. In these programs, alumni entrepreneurs always play a major role as mentor and coach and also offer student internships.

A closer look at the curricula of the Bay Area higher education institutions reveals that developing entrepreneurial skills and a pro-entrepreneurship attitude is a structural feature of basically all courses. Creativity, innovation, sharing, thinking big, problem solving, and competitiveness are standard components of the curriculum. The universities provide a learning and experimenting environment in which students are encouraged to start their own businesses, to become entrepreneurs. They help them to turn their idea into a marketable product and supply them with the necessary resources. Bay Area universities (and research labs) show a unique combination of academic excellence and entrepreneurship. This double mindset has made the area into a highly successful innovation and startup region. It has created an entrepreneurial culture that blends both innovation-mindedness and innovation valorization, and upstream and downstream innovation.54

Silicon Valley’s rich talent pool is a major competitive advantage and a solid pillar of its ecosystem. But the talent pool must be maintained regularly in order for high-tech companies and startups to continue prospering in the near future. There are serious indications that in view of the drastic budget cuts in recent years, the California system of public higher learning needs a
significant investment upgrade (Public Policy Institute of California 2015; Bay Area Council 2012, 2014a, 2016). Its reputation appears to be at stake.

Facilitating government

Many American high-tech entrepreneurs tend to believe that technological innovation should be left to free market forces and that government should not interfere with their business. The role of government in innovation development, they argue, is and should be minimal. In my view, this prevalent opinion is based on a myth that needs serious debunking, as it is at odds with American innovation and technology policy over the last seventy years. The U.S. government has, in fact, played a pivotal role in building strong ecosystems such as Silicon Valley. The history of Silicon Valley clearly shows that the U.S. government has been a prime mover in promoting technological innovation: through massive R&D funding, as a first customer of innovations, in its regulation of market rules, and in its facilitation of high-tech talent. High-tech companies, including new ventures, have greatly profited from this active government intervention.

World War I led to a spike in the U.S. navy’s demand for more powerful radio technology for its war fleet, which spawned the development of more reliable and more advanced shipboard transmitters and transmitter stations. FTC, a Stanford ‘startup’, was the first Bay Area company to develop vacuum tube technology and was awarded large government contracts. It marked the start of a flourishing radio technology industry in the region. World War II and the Korean War accelerated the demand for high-frequency radar and worldwide networks of radio communications systems. The U.S. government quickly became the prime contractor for commissioning military research and the funder of innovative defense technologies (e.g., microwave technology). This burgeoning military demand for high-tech radar and communications systems gave a formidable boost to the development of the Bay Area’s R&D and led to the founding of pioneering research centers.

The Cold War resulted in an unprecedented technological rivalry between the U.S. and the Soviet Union, leading to a furious Space Race between the two power blocs. This prompted the Bay Area to enter a new sector of technological innovation: aerospace and missiles. The region greatly benefited from the massive government defense spending at the height of the Cold War, which helped to create an advanced and highly competitive innovation-based ecosystem. Without these unprecedented levels of defense expenditure, Silicon Valley would not be what it is today. As historian Stuart Leslie (2000: 49) concludes: “For better and for worse, Silicon Valley owes its present configuration to patterns of federal spending,
corporate strategies, industry-university relationships, and technological innovation shaped by the assumptions and priorities of Cold War defense policy.”

The technological developments before and early after World War II helped to build an innovation infrastructure that became a fertile basis for the semiconductor revolution that transformed Silicon Valley into the main region in the U.S. for manufacturing silicon devices. This is what gave the Valley its name, and this in turn prepared Silicon Valley for the next revolution, which gave way to the PC era and, later, the software explosion. The Valley became a vibrant place of pioneering technological innovation in which universities, high-tech companies, and research centers greatly benefited from the U.S. government as a driving force of innovation. As the Bay Area Science & Innovation Consortium Report concludes: “No other region in the United States or in the world has more federally funded research centers and laboratories.” For example, over 80% of Stanford University’s more than 5,300 externally sponsored projects (totaling $1.33 billion in 2014-2015) is funded by federal money.

The stereotype of a passive U.S. government in the technological domain is not justified and needs to be demystified. It is rhetoric rather than fact. The U.S. government did and does play a leading role in the development, diffusion, and adoption of technological innovations. Mariana Mazzucato convincingly reasons in her book, *The Entrepreneurial State*, that: “Despite the perception of the U.S. as the epitome of private sector-led wealth creation, in reality it is the State that has been engaged on a massive scale in entrepreneurial risk-taking to spur innovation. (...) The insight gained is that other than being an entrepreneurial society, a place where it is culturally natural to start and grow a business, the U.S. is also a place where the State plays an entrepreneurial role, by making investments in radical new areas.” (Mazzucato 2014: 73). The Apple iPhone, the iPod, and the iPad, she shows, make use of innovative technologies that were funded by federal and military U.S. R&D programs. These smart technologies are the products of decades of government investments in fundamental and applied innovation research.

But the role of the U.S. government goes further than massive funding of innovative technologies and R&D. It has also acted as a launching customer of technologies and innovations, as a lawmaker, as a simulator of small business participation, and as a supplier of visas for foreign workers. Of particular importance was the Bayh-Dole Act of 1980 that regulated the transfer of property rights of federally funded research to the university or the research laboratory through the design of a uniform patent policy. This
new system of property rights spurred the commercialization of new technologies, innovations, and knowledge that were acquired via government-funded projects. The 1981 R&D tax credit law helped companies to finance basic research and development activities. The Small Business Innovation Research (SBIR) program of 1982 was instrumental in supporting SMEs to qualify for early-stage funding and to help them through the tough first stages of the innovation cycle, allowing them to bridge the feared ‘valley of death’.

Immigrants play a major role in Silicon Valley’s ecosystem, both as startup founders and as high-tech workers. Allocating quotas for immigrants was and remains a tricky business and a much debated issue. The Hart-Celler Act of 1965 changed the way the U.S. government set quotas from one based on an immigrant’s national origin to one that gives preference to immigrants with specialized skills and is still intact today. It led to a radical increase in the number of talented immigrants, though many Silicon Valley entrepreneurs feel that the procedure itself remains a long and often frustrating process. Especially H-1B visas (for non-U.S. scientists with a ‘specialty occupation’) are a source of chagrin among startup founders who want to hire foreign specialists, as demand greatly exceeds supply. The Trump administration has announced that it would review the quota policy as part of its ‘buy American, hire American’ doctrine.

These four examples illustrate that the U.S. federal government has played an active role in stimulating innovation and in ‘regulating’ the innovation market. It has provided the startup business community with a sense of long-term stability and predictability (with the exception of some visa regulations). More recently, the Obama administration introduced the 2012 JOBS (Jumpstart Our Business Startups) Act, which enables startups to raise funding among the general public and not just among accredited investors. The new law, according to Silicon Valley author Randall Stross (2012: 205), demonstrates that “startups, as a category, had become darlings in Washington”.

**Startup support infrastructure: Accelerators and legal advice**

Silicon Valley and networking have always gone hand in hand. Entrepreneurship is embedded in a professional regional system of business support and counseling. Accelerators are a vital part of this network support system because they offer resources to startup teams to build, scale, and grow their new venture. These resources (coaching, mentoring, training, funding, networks) are exactly why accelerators are given such a prominent place in my Silicon Valley Innovation and Startup Model. But there are
other actors and agencies in the support system that also exist to service startups. The Valley’s ecosystem offers access to lawyers, accountants, domain experts, and, as described above, angels and VCs, all of whom help startup founders to refine, develop, and commercialize their business. The ecosystem consists of extensive social networks that link startups to corporates, investors, talent, (potential) customers, and stakeholders (Castilla et al. 2000). Networking by startup founders can create new business opportunities, new market venues, new partnerships, and new deals. Networking, according to Van Weele (2016), is the main mechanism through which accelerators contribute to startup achievement: “Networking enables startups to access missing resources, to efficiently acquire market, business and technological knowledge, to gain legitimacy, to overcome challenges in the entrepreneurial ecosystem and to raise investments.” (2016: 213). And as I outline in the next section, networking also has a cultural component: it is part of the Valley’s entrepreneurial spirit, its social mindset, its business mind.

Law firms play a distinct role in the Valley’s startup economy and network support system. Unlike mainstream European law practices, they not only offer legal expertise on how to start a new venture but also provide tailor-made business advice. Law firms assist startups in their early-stage business development by opening doors to investors, corporate stakeholders, and possible partners. They offer contacts and introductions that startup founders need. “It is often a lawyer’s ability to make a key introduction to a potential source of funds or corporate partner that a beginning entrepreneur values most.” (Johnson 2000: 327). Law firms first and foremost help startups with the legal paperwork and technicalities that setting up a new venture entails, but their role is much broader in assisting beginning entrepreneurs. Their advice may concern startup structure, management issues, team formation, financing, staff hiring, business strategy and proof of concept, stock ownership, patents, tax matters, etc. Lawyers help startup founders in addressing dilemmas and pitfalls typically encountered by new ventures. In this sense, they are more business advisers than legal consultants. According to sociologist Mark Suchman (2000), Silicon Valley lawyers serve as dealmakers, counselors, gatekeepers, proselytizers, and matchmakers. They are a startup’s consigliere. And the legal market is sizeable in Silicon Valley. Weinberg & Heine (2014) have calculated that there are over 400 law firms and nearly 3,000 attorneys in Palo Alto alone (roughly one lawyer per twenty residents).

An interesting feature of the active involvement of Silicon Valley lawyers in mentoring startup teams is that they often work on the basis of the
pay-it-forward principle: billing is postponed until startup revenues come in, or law firms (and sometimes individual lawyers) may take stock ownership in lieu of payment. Such deferred fee arrangements relieve startups in their financially most precarious phase: early-stage development and the ‘valley of death’ phase in which revenues are still insufficient to cover costs. This payment flexibility means that startups are not deprived of the legal advice they need when launching their new business.

There is a fine line between legal advice, business advice, and entrepreneurship, and as a result, roles often overlap. European law firms generally feel more comfortable with a stricter role definition that separates legal advice from business counseling, and indeed, national legislation in Europe often requires just such a role distinction. Ethical issues may be at stake as well, such as conflicting interests between independent legal advice and private benefits. Lawyers in the Silicon Valley startup ecosystem pursue a broader, more entrepreneurship-based role – a professional self-definition that has made them influential.

As will become clear in the following chapters, accelerators also have a key position in the Silicon Valley network support system, as their mission is to gear up startup teams for launching their new venture in the marketplace and for growing traction and customer reach. Having gone through a high-profile, influential accelerator program provides a startup with credibility and goodwill. And above all: with good funding prospects.

The macro level: Culture, culture, culture

Silicon Valley has an amazing innovation ecosystem that is based on a number of powerful institutions, as I have outlined in this chapter. But this is only part of the success narrative. Equally important is that the Valley is characterized by a shared culture that embraces innovation and applauds entrepreneurship – a culture that has inspired generations of startup founders who have combined passion and ambition to create some of the world’s most imaginative high-tech companies. The Valley has a pulsating startup culture and business community that has a magic appeal to new venture founders. Newcomers to the area can almost feel the vibe, the stream of positive energy blended with a can-do mentality. To a certain degree, this reflects the typical American West Coast frontier state of mind, but the Valley appears to magnify this cultural temperament.

The open communication mode and the willingness to share ideas and innovations are among the most striking cultural traits of Silicon Valley’s startup community. It always fascinates me how frankly startup founders
talk about their new business concept: the product, underlying technology, business model, market potential, investors, growth challenges, strengths and weaknesses of their startup, etc. There seems to be no fear of giving away business ‘secrets’. This open attitude is one that many European observers find difficult to understand but usually greatly admire. Startup founders are willing to share their business idea but in return expect feedback, even when their idea is in a very embryonic and vulnerable stage. Sharing can strengthen your own ideas – this seems to be the prevailing cultural message. You do not ‘sit’ on your business concept, as the mainstream European response tends to be, fearing that competitors might run off with your idea.

This open communication style is refreshing: it activates innovation feedback, generates new leads, and triggers self-reflection and learning. As Chong Moon-Lee and his co-authors observe: “The prevailing business philosophy promotes openness, learning, sharing of information, the co-evolution of ideas, flexibility, mutual feedback, and fast responses to opportunities and challenges.” Networking is an essential part of this welcoming business philosophy, as new contacts may produce new business prospects. Everybody is willing to grant you time, even if it is only five minutes, to outline your startup business idea. It is one of the most pleasing qualities of the Valley’s business culture.

The entrepreneurial attitude that colors the micro-level of startup creation discussed earlier in this chapter mirrors the culture of Silicon Valley entrepreneurship at the aggregate level, a culture that emphasizes the need to think big, to launch disruptive technologies, to change the world, and to go for moonshots (projects that address a huge problem, propose a radical solution, and use breakthrough technology). In the Valley, one encounters grand cultural narratives articulated in grand Silicon Valley jargon. One of the most spectacular examples is Elon Musk’s plan to colonize Mars and turn the human race into a multi-planetary species – an incredible business adventure that is beyond the human imagination but an adventure that his company SpaceX is nonetheless seriously working on. Its mission is “to revolutionize space technology with the ultimate goal of enabling people to live on other planets.” This is thinking big to the max.

Risk-taking and the tolerance of failure are among the most defining features of Silicon Valley’s business culture, which directly impact the startup economy. Risk proneness is seen as a positive trait that makes up the psychological core of entrepreneurial thinking and acting. The prevailing maxim is: no risk, no glory. The acceptance of failure is another compelling Silicon Valley cultural phenomenon. Startup founders who fail are not confronted with the common negative stereotypes that often mark
the European reaction towards new venture failure and bankruptcy. The stigmatization of starting entrepreneurs who fail is not part of the Valley’s business culture.62 Entrepreneurs frankly discuss why their startup was unsuccessful and the lessons they learned for building a new venture.63 A failed startup is a meaningful learning experience, and VCs even favor startup entrepreneurs who have prior experience with a startup that did not make it. Failure, of course, remains a painful event and is not admired for its own sake. As Reid Hoffman, LinkedIn’s co-founder, noted: “We don’t celebrate failure in Silicon Valley. We celebrate learning.” Startup failure in Silicon Valley does not equal personal failure. The fact that the tolerance of failure is high also adds to a business climate that is optimistic and self-confident. It has to be underlined that, unlike most European countries, U.S. legislation (e.g., bankruptcy laws, limited partnerships) is such that it limits personal liability for startup founders and their investors. It is easier to close down a company. Studies indicate that more lenient bankruptcy laws positively affect self-employment as well as firm entry and exit rates (Armour & Cumming 2008; Fan & White 2003; Cerqueiro et al. 2017).

Silicon Valley’s business economy never stops; it runs 24/7. Its work attitude is unmatched. Building a startup requires unconditional attention and permanent availability, as you must develop products that will shake markets, find new customers, pivot, address the many problems that startups have to face, and stay ahead of the competition. The drive to excel pervades the Valley’s startup community and creates a business culture of passionate and committed entrepreneurship. Hard work, perseverance, and giving your all are the rule for both startup founders and their employees. It is a work culture characterized by an all-or-nothing attitude. Heated debates on work-life balance are rare. Complaining about long hours is ‘uncool’; building a startup is not a picnic. Startup stress is definitely prevalent in Silicon Valley, but it is not a conversation topic. Yu-Kuan Lin, co-founder of Everyday.me and a Y Combinator graduate, once said: “Nothing prepares you for founding a startup besides founding a startup.” (Deering 2014: 137).

But even all the hard work in the world cannot prevent the fact that most startups fail, even in Silicon Valley. CB Insights (2014) investigated the main reasons for startup failure by analyzing data from over 100 startup failure post-mortems. The top seven causes, in descending order, are: no market need for product, running out of cash, wrong team, being outcompeted, pricing/cost issues, poor product, or lack of a business model.64 “Fail fast, fail often” is a much-heard Silicon Valley aphorism that refers to the need for timely startup closing in order to avoid what VCs call ‘the walking dead’: startups that go on too long without any serious revenue.
Diversity is a cherished goal in Silicon Valley. It is believed that a highly diverse workforce in terms of ethnicity, gender, and nationality is good for innovation. It brings multiple perspectives, challenging viewpoints, out-of-the-box thinking, and global frames of reference, and it broadens the talent pool. High-tech companies operate worldwide and therefore need a diverse workforce to understand and service global customers (Hunt et al. 2015). Though the big high-tech Silicon Valley corporations nourish the ideal of diversity, their workforces still show considerable ethnic and gender biases (Ester & Maas 2016: 125-129). There is still a world to win: African-Americans, Latinos, and women are underrepresented, while whites and Asians are overrepresented.

A clear diversity asset of the Valley is the number of highly successful immigrant entrepreneurs. One out of two new ventures in Silicon Valley is started by immigrants, which is twice as high as the U.S. average. The total market capitalization of venture-backed U.S. companies founded by immigrants totals $900 billion, and they employ about 600,000 people.

Culture matters in Silicon Valley. It is a determining factor in explaining why the region thrives on innovation and entrepreneurship, why it succeeded in becoming and remaining a global paradise for high-tech startups. Silicon Valley's ecosystem flourishes because it is backed by a cultural mindset that is highly competitive, willing to take risks, passionate about entrepreneurship, achievement-oriented, and driven by the need to make a difference in the world. Accelerators, as I will show in the following chapters, explicitly address the importance of working on a startup mindset that matches the Silicon Valley way of thinking and takes advantage of its omnipresent entrepreneurial culture.

In this chapter, I have analyzed Silicon Valley's ecosystem and the way it perpetuates innovation and feeds startup creation. Understanding this ecosystem is necessary for comprehending the role of accelerators in the Valley. It provides the bigger picture that is necessary for assessing how accelerators empower startup teams to build and grow their new businesses.