

Demystifying Silicon Valley: Unequal entry thresholds between entrepreneurial ecosystems

Katharina Scheidgen

Georg-August-University Göttingen and Lund University

Michaela Hruskova

University of Stirling

Abstract

Silicon Valley is widely recognised as a leading entrepreneurial ecosystem as it provides a plethora of key resources that promote entrepreneurship. Although the existing ecosystem debate implicitly assumes that entrepreneurs have equal access to resources, we argue that this is not necessarily the case. We explore how entrepreneurs access ecosystem resources, specifically risk capital, and compare Silicon Valley with Berlin. We find that each ecosystem has a different ecosystem entry threshold at which start-ups become investable and can access financial resources. Entrepreneurs share an understanding of investors' criteria: in Silicon Valley, start-ups must demonstrate venture traction, meanwhile in Berlin a strong founding team is sufficient. Consequently, they undertake legitimizing activities to fulfil these anticipated investment criteria accordingly prior to fundraising. Therefore, our study demonstrates how Silicon Valley is a highly selective and demanding ecosystem, and argues that it excludes many entrepreneurs, fosters inequality, and leads to homogeneity among start-ups.

1. Introduction

Over decades, Silicon Valley has advanced to one of the leading entrepreneurial ecosystems worldwide (GEM, 2018; GII, 2018; Silicon Valley Index, 2020). It has originated a large number of breakthrough innovations (Ferrary and Granovetter, 2009) and has become a powerful magnet for entrepreneurs from all around the globe (Isenberg, 2010). Policy makers across the world seek to create their own successful entrepreneurial ecosystem by emulating Silicon Valley (Isenberg, 2010). The success of Silicon Valley can be attributed to several factors. Although regional proximity and the presence of excellent universities are important, other contributing factors include an informal communication culture (Saxenian, 1996), the prominent role of venture capitalists (Ferrary and Granovetter, 2009) and initial military

contracts (Saxenian, 1996; Adams, 2021), as well as the impactful role of Stanford University's Dean Frederik Terman (Gibbons, 2000), and fortuitous timing (Bahrami and Evans, 1995), all of which contributed to a series of events that eventually gave rise to one of the most innovative regions worldwide.

While entrepreneurial ecosystems are generally expected to provide the comprehensive resources that are necessary for high-growth entrepreneurship (Isenberg, 2011; Spigel, 2017), Silicon Valley does this in an outstandingly sophisticated manner (Brown and Duguid, 2000; Hellmann, 2000; Lee et al., 2000). Diverse, well-connected actors work together to bring about ground-breaking innovation through entrepreneurial activities (Bahrami and Evans, 1995; Ferrary and Granovetter, 2009). Venture capitalists are 'armed with a network of contacts' (Bahrami and Evans, 1995: 67) and bring 'technical skills, operating experience, and networks of industry contacts—as well as cash—to the ventures they fund' (Saxenian, 1996: 39). Prestigious universities like Stanford University or Berkeley University contribute the newest scientific advancements and highly educated young people with an entrepreneurial spirit. Lead customers ease market access and help reach product-market fit. Lawyers specialize in entrepreneurship-related issues and thus contribute unique expertise (Johnson, 2000). Yet, the resources provided by the ecosystem only help promote entrepreneurship and, consequently, economic growth if entrepreneurs can actually access them (Scheidgen, 2021). Thus, we ask: *How can entrepreneurs access ecosystem resources? And how does this differ between entrepreneurial ecosystems?*

To answer these questions, we are going to have a closer look at how entrepreneurs acquire one of the most important resources—financial capital. We draw on rich qualitative interviews with both entrepreneurs and investors to investigate the threshold for securing early-stage growth capital. We find that Silicon Valley entrepreneurs must achieve *venture traction* prior to approaching investors. This is a relatively high threshold for securing investment because it means that the start-up must either use the founders' personal savings or obtain risk investment from other ecosystems to build the (minimum viable) product and generate sales before it can access risk capital from Silicon Valley investors. How extraordinarily demanding this threshold is becomes particularly apparent when we compare it to the entrepreneurial ecosystem in Berlin, where a strong *founding team* is sufficient to attract investment from the outset.

Although Berlin has a much younger entrepreneurial ecosystem than Silicon Valley, over the past two decades it has developed a reputation as one of Europe's leading start-up hubs (EY, 2019). Approximately a fifth of all German start-ups are located there (DSM, 2018), partially

due to superior access to funding compared to the rest of country, as evidenced by the fact that more than half of all German start-ups which have received venture capital are based in Berlin (BSM, 2018). What is more, Berlin still has comparatively low office costs, good infrastructure, and attracts well-educated professionals both nationally and internationally (Richter and Schildhauer, 2016; Kuebart, 2021). Therefore, Berlin's maturing ecosystem provides a suitable case to compare with Silicon Valley.

Overall, our study shows that entry thresholds differ significantly between entrepreneurial ecosystems. In Silicon Valley, entrepreneurs have to fulfil more challenging criteria to secure investment than in Berlin which makes it far more selective and demanding. Thus, our study underscores that emulating Silicon Valley might be a double-edged sword (Brattström and Wennberg, 2021). We critically reflect on the positive and heroic image of Silicon Valley and demonstrate that despite all that glitter and glamour, despite all that champagne and billion-dollar successes, Silicon Valley is not all about rainbows and unicorns. It excludes many entrepreneurs, leads to homogeneity among start-ups, and fosters inequality across entrepreneurial ecosystems. Thus, ecosystems might evolve along different success trajectories, which are influenced by how high they set their entry threshold.

2. Accessing resources in entrepreneurial ecosystems

Entrepreneurial ecosystems play a key role during the entrepreneurship process as they provide entrepreneurs with the resources necessary to grow their start-up (Mason and Hruskova, 2021). These regionally bounded organizational environments comprise diverse actors, provide manifold resources, and enable entrepreneurial activities through supportive cultures, norms and institutions, and thus contribute to economic growth (Mason and Brown, 2014; Cao and Shi, 2021; Stam and van de Ven, 2021; Wurth et al., 2021).

While most research focuses on the ecosystem level, e.g. the evolution of ecosystems (Feldman, 2001; Thompson et al., 2018; Harima et al., 2021), their success factors (Audretsch and Belitski, 2017; Spigel and Vinodrai, 2021), or regional particularities (Saxenian, 1996; Lee et al., 2000; Spigel, 2017), very few studies focus on how entrepreneurs can actually access the resources provided by entrepreneurial ecosystems (Brush et al., 2019; Scheidgen, 2021). This upcoming line of research indicates that not all entrepreneurs have the same access to the resources

provided by the entrepreneurial ecosystem. For example, women might face severe challenges when trying to mobilize ecosystem resources (Brush et al., 2019).

To access resources, entrepreneurs need to be perceived as legitimate actors by the resource providers (Steier and Greenwood, 2000; Shane and Cable, 2002; Delmar and Shane, 2004). Hence, legitimating activities of entrepreneurs become a key success factor (Delmar and Shane, 2004). As the importance of legitimacy for resource acquisition has been emphasized by new institutional theory for decades (Meyer and Rowan, 1977; DiMaggio and Powell, 1983; Scott, 1995; Zietsma et al., 2016; Boxenbaum and Jonsson, 2017), we take an institutional perspective on entrepreneurial ecosystems (Thompson et al., 2018; Auschra et al., 2019) and focus on entrepreneurs' efforts to signal legitimacy to potential resource providers within the ecosystem. Based on DiMaggio and Powell's (1983) seminal work, we expect start-ups to observe other start-ups within their ecosystem and develop a shared understanding of what potential partners (e.g. investors) might expect of them, and under which circumstances they perceive the start-up as a legitimate partner. This structures their legitimizing activities and simultaneously reproduces the expectations and evaluation criteria of the partners. Hence, institutionalized signals and expectations regarding which entrepreneurial undertaking is legitimized as a promising start-up impact the accessibility of resources from the ecosystem. Simply put: only if the start-up follows the rules and is able to present itself as a legitimate partner, it will be able to actually access the resources provided by the ecosystem. Yet, we barely know how start-ups actually manage to do so, and how this differs between EEs.

3. Methods

To better understand how entrepreneurs can access resources from the entrepreneurial ecosystem, we compare how early stage start-ups acquire first equity investment in Silicon Valley and Berlin.¹ We specifically focus on financial capital because this is one of the key resources for accelerating high-growth entrepreneurship. Business angels and venture capitalists provide not only financial resources, but also advice and network access, thus embedding the entrepreneurs within the entrepreneurial ecosystem (Steier and Greenwood, 2000; Ferrary and Granovetter, 2009; Milanov and Fernhaber, 2009).

¹ This empirical material is part of a more comprehensive data set. Here, we focus on certain parts of that data set, namely, start-ups and their efforts to signal legitimacy when acquiring resources from the entrepreneurial ecosystem.

As Figure 1 shows, we first selected two entrepreneurial ecosystems: Silicon Valley and Berlin. Second, in both ecosystems, we sampled start-ups with growth aspirations that were in the early founding stages. Given that entrepreneurial ecosystems are sector agnostic (Spigel and Harrison, 2018), we sampled start-ups that offer hardware and software products and target B2B as well as B2C markets across different industries. To better understand ecosystem entry thresholds, we conducted semi-structured interviews not only with start-ups that were fundraising, but also with other entrepreneurship actors active in the ecosystem, like angel investors, VCs, or public funding agencies. In total, the data set comprised 63 interviews, lasting between 40 and 90 minutes (see Figure 1).

--- Insert Figure 1 about here ---

We coded the data parts where entrepreneurs articulated ideas about what is necessary to attract investors as well as their activities to become interesting for investors. The subsequent analysis focused on these data parts. As Figure 1 shows, we coded the data in two cycles (Miles et al., 2014) and searched for similarities and differences across start-ups in both ecosystems (Eisenhardt, 1991; Eisenhardt and Graebner, 2007; Klag and Langley, 2013). It became apparent that entrepreneurs share a certain understanding about what is necessary to signal legitimacy to investors. We developed the concept of ‘anticipated investment criteria’, i.e. shared ideas among entrepreneurs about how investors evaluate a start-up as a legitimate and attractive investment opportunity. These anticipated investment criteria strongly guide the legitimizing activities of entrepreneurs. Interestingly, Silicon Valley-based entrepreneurs articulated very different anticipated investment criteria of investors than Berlin-based entrepreneurs, as we will outline below.

4. Ecosystem entry thresholds in Silicon Valley

In Silicon Valley’s ecosystem, investors are a key actor because they provide start-ups with comprehensive resources (Ferrary and Granovetter, 2009), including networks, knowledge, and finance. By providing access to a particularly wide range of actors, they play a key role in embedding start-ups within the ecosystem. Many individuals invest as angel investors in parallel with another business activity. For example, angel investors can be entrepreneurs themselves, VC fund managers, consultants, or university professors. As one of CoDesk’s founders explains, almost everyone in Silicon Valley is also an angel investor these days: *‘Like*

now, everyone is an angel investor. I'm an angel investor. And also I'm investing for our venture capital firm. Now everyone has money. [...] It's like everyone is an investor. It's crazy.' (I-58). However, given that many start-ups fail, investors must select their portfolio companies carefully. Therefore, it is very important that start-ups seeking funding understand how to make themselves attractive to investors and act accordingly.

4.1. Entrepreneurs anticipating investment criteria in Silicon Valley

Our data clearly shows that entrepreneurs share a common understanding of investors' evaluation criteria to determine whether or not a start-up is legitimate. This is illustrated by one of the founders of ProHealth who refers to these evaluation criteria as 'checkboxes': *'You have some numbers, you have team, you have technology, you have patent. And [venture capitalists] all look at it like checkboxes: "Ok, ok, ok, ok! You have everything!"'* (I-62).

Specifically, we identified five different investment criteria that entrepreneurs and other ecosystem actors anticipate to guide investors' decisions: (1) venture traction, (2) technology (IP), (3) personal track record, (4) headquarters in Silicon Valley, and/or (5) relationships with highly regarded actors in Silicon Valley, all of which signal legitimacy to potential investors. Although most of these are required, based on our data, *traction* is the most important one. It demonstrates that the product is feasible and that the start-up has a good product-market fit and can thus attract customers, which decreases the uncertainty and risk of failure for investors. Therefore, it will be discussed in more detail throughout this and subsequent sections.

Entrepreneurs share the idea that investors expect their start-up to already show *traction*: *'[Investors] today want to see traction.'* (AutoAccount; I-57). One of the founders of Tradesi also states: *'You have to somehow get to a real place of traction,'* before initial investment relationships can be formed (I-64). This is also reflected in the assessment of one of LockChip's founders: *'Investors want to see validation of product'* (I-65). This validation can be shown by attracting initial users or sales. As one of the founders of NetVider points out, the company needs to achieve either significant revenue or user sign-ups before they can begin to acquire investment: *'We need to be hitting about 300K per month in revenue and about 600, 700 thousand users.'* (I-56). It is clear from this statement that the founder sees these numbers as a necessary prerequisite for forming relationships with investors. In a similar vein, CoDesk attributes its successful acquisition of risk capital to its traction. They are convinced that their

good numbers gave confidence to investors about their potential success: *'We had good metrics. So, the revenue of the company was growing, the traction was very strong. [...] The fact that we have so many customers already using [our product] has given us a lot of credibility.'* (I-58). Traction gives credibility and thus legitimacy to the start-up. In contrast, a lack of traction is likely to prevent founders from raising investment: *'People were saying that I have a great idea, but again, [the idea] was unproven.'* (I-70). As one founder of Detools explains, without a (minimal viable) product or prototype, *'you can't raise VC money because you don't have enough to raise on. You don't have a prototype.'* (I-71).

As a result, traction determines when a start-up can acquire financial resources from Silicon Valley investors: after it has attracted its first customers or consumers. Given that this often requires building at least a minimal viable product, entrepreneurs thus need to finance the initial product development through other means.

4.2. How entrepreneurs seek to fulfil the anticipated investment criteria

The lack of access to external funding to cover the cost of product development leads to a key challenge: *'You need money in order to get the product, but in order to get money you need to demonstrate the product.'* (LockChip; I-65). This emphasizes how demanding it is to source risk investment from the Silicon Valley ecosystem. Before the start-up can access Silicon Valley's resources, it must take decisive steps in the founding process. One of the founders of Tradesi describes that figuring out how to develop a product before acquiring risk investment is a decisive part of the entrepreneurial journey: *'That's part of figuring it out. That is the main thing. If you can figure it out, how to hustle, how to stay above water, and continue to make progress.... That's like 90 percent of the battle!'* (I-64). He describes looking for investment at the very beginning of the start-up as *'the completely wrong way to approach things'* (I-64). Instead, *'You should spend your time, in B2B, with understanding your customers, finding your first customer, proving it out and then worrying about the fundraising.'* (I-64).

However, this requires entrepreneurs to bootstrap their business in one of the most expensive regions in the world, pointing to a rather high entry threshold of the Silicon Valley ecosystem. Therefore, entrepreneurs have to bring in their own financial resources, even though it is extraordinarily challenging for them: *'It's very hard to bootstrap. First of all, think about it, you have to go without salaries for whatever duration and you're writing checks, not getting*

checks. And you also understand that you put a certain amount of your personal capital into this.' (AIsience; I-55). He and his two co-founders financed the first three years with two employees from their own savings.

These savings are typically generated through the founders' previous entrepreneurial experience. In seven of our Silicon Valley cases, these come largely from exits from their previous start-up(s). However, only the founders of AIsience, CoDesk, and PageFuse also founded their previous start-ups, which have now been sold, in Silicon Valley. In contrast, the founders of NetVider, Datery, Nutrics and ProHealth had previously founded and sold at least one start-up outside the USA and then used the financial resources generated in the process to fund their next start-up in Silicon Valley. Meanwhile AutoAccount, Tradesi, LockChip, Coderiq, Mintel and TechTrout primarily used savings generated during their previous work in Silicon Valley. The founder of TechTrout also gained additional funds from the sale of company shares, which he had received as an early employee. This shows how early employees financially benefit from their employer's success which can then fuel their own entrepreneurial venture. Also, the employees of well-established Silicon Valley companies may save up several hundred thousand dollars from their salaries. These can then be used to fund early product development: *'A lot of projects are started by guys, let's say, ex-Googleers, ex-Facebookers, or whatever, who had pretty good salaries and they could invest a few hundred Ks into their own project.'* (LockChip; I-65).

Nevertheless, the founders' own savings are rarely enough to fully fund the first few years of the new venture. One option is to finance the start-up using early revenue. This was the case with CoDesk and PageFuse, whose founders supplemented their own savings with revenue generated through early sales once a first prototype was developed. Another way for entrepreneurs to increase their available capital is to ask their family and friends. *'At an early stage they [angel investors] say: "Go and raise money from your friends and family!"'* (LockChip, I-65).

In fact, the expectation is for founders to invest between 100,000 and 500,000 U.S. dollars into the venture either from one's own savings or loans from family and friends. This is meant to signal the founders' commitment and motivation and also reduce the likelihood that they will give up: *'If your spouse or your parents or your aunts and uncles can help support you for a little while, so that you can prove something out, that's great. And it means to me, I can see not only you taking risk for yourself, you are taking risk with your parents' money, with your uncle's money, with your spouse's money. You're committed. You're not going to quit halfway through*

this. [...] If I gave you 5 million dollars for your company, you might just go to a beach and you are done. But if it's your parents' money it's not likely that this is going to happen.' (Dean, venture capitalist employee and angel investor; I-82). However, some start-ups may avoid this route by raising investment from another ecosystem. This was the case with ProHealth, which acquired a nearly \$2 million investment from European venture capitalists before moving its headquarters to Silicon Valley.

Overall, the very early founding activities—when uncertainty is particularly high—are thus funded through financial resources from outside of Silicon Valley's ecosystem. If the start-up fails, it does not drain financial resources from the ecosystem as it only burns resources that are not pertinent to its (re)production. In this way, the risks to the ecosystem resources are mitigated.

In summary, Silicon Valley does not just provide comprehensive resources, it also imposes relatively demanding entry thresholds on entrepreneurs and new ventures to access these resources. It takes significant effort for entrepreneurs and their start-ups to present themselves as legitimate which they primarily do by bootstrapping the business until it achieves sufficient traction. Thus, not everybody can embed themselves in Silicon Valley's entrepreneurial ecosystem, start their entrepreneurial journey there, and access the comprehensive resources of this ecosystem. Presenting a start-up as legitimate and promising investment looks much different in Berlin, as we are going to outline below.

5. Ecosystem entry thresholds in Berlin

Due to its young age, the Berlin ecosystem has accumulated fewer resources through the process of entrepreneurial recycling than Silicon Valley. For example, one of the founders of NewBroker describes that most angel investors in Berlin only have sufficient financial resources to make one or two investments before they run out of money for a period of time: *'So what we have underestimated a bit is that in Berlin, there are few [angel investors] who really invest professionally. But rather many who say: "Okay, I want to invest so and so much now, [...] and then I'm done." But that also means that if you see somewhere that someone has invested, and then approach her, she will no longer invest.'* (I-25). In contrast, many Silicon Valley angel investors have sufficient financial resources to invest whenever an opportunity presents itself. This illustrates that Berlin's ecosystem provides fewer financial resources and

in smaller tranches than Silicon Valley. Yet, the two ecosystems do not only differ regarding the amount of resources they provide, but also in the legitimate ways of how entrepreneurs are able to access them.

5.1. Entrepreneurs anticipating investment criteria in Berlin

In Berlin's ecosystem, the most important investment criterion that entrepreneurs expect to guide investors' decision is the *founding team*. If start-ups have a strong team in place, they can access risk capital from the very first day of their entrepreneurial journey.

Nine of our sampled Berlin-based start-ups were funded by one or more angel investors from the outset. For example, before founding Webuvi, two of the co-founders worked at another start-up: Payzea. While working at Payzea, legal changes in Germany allowed them to pursue their own entrepreneurial opportunity. They quit their jobs at Payzea to develop the Webuvi e-commerce platform. As one of the founders explains, they were funded via angel investment from day one: *'We were funded by an angel investor from the first day on.'* (I-23). They acquired first risk investment at a time when no product, not even a preliminary prototype, had yet been developed. This is possible because angel investors invest mainly in the team, with the idea being secondary: *'I think finding the perfect team is one of the most difficult things. Basically, if you want to raise money, the investors invest predominantly in the team, secondarily in the idea. They have to trust the team that even if the idea does not work one hundred per cent, the team is able to give it a different twist and find a way to still make some money in the market. The founding team is the most important.'* (I-23). This resonates with the explanation of one of the founders from ProjectPlanner that investors *'invest 80 percent in the team'* (I-19). This is recognized as a taken-for-granted rule in the entrepreneurial community and articulated by several interviewed entrepreneurs. The institutionalization of the team criterion is also evident from one of SafetySolution's founders: *'Angel investors invest in the team.'* (I-4). Angel investors believe in the vision and promise of SafetySolution, and in the team, who must deliver these (I-4). The team should comprise three co-founders with complementary skillsets. For example, one of the founders of RateYourDrink speaks of a *'rule of thumb'*, according to which one should assemble the founding team: *'The general rule of thumb is, no VC invests in a lone warrior. The ideal is a group of three people with different competences, team completed.'* (I-15).

As a result, the team is the key criterion that determines the start-up's ability to acquire investment. The need for a strong founding team with the right skillset then guides the founders' behaviour prior to approaching investors.

5.2. How entrepreneurs seek to fulfil the anticipated investment criteria

As Berlin-based entrepreneurs share an understanding that investors' primary evaluation criterion is the team, they form their founding team accordingly. This is once again demonstrated by Webuvi. Its two co-founders had anticipated that investors would invest primarily in the founding team and the founders' expertise. Thus, they specifically looked for a technical co-founder: *'Our technical co-founder is super experienced. It was clear to us that we needed another technical co-founder who has much more technical experience than I do.'* (I-23). The situation was similar with AIweb, whose two co-founders with a managerial background initially hired freelancers to develop their product before eventually employing a small developer team. None of the developers were given a co-founder status until a potential investor noted that they expected them to name a Chief Technology Officer (CTO) before closing the deal: *'We started to negotiate with investors and we figured, okay, now we need a CTO, because they want a CTO. So we were thinking, "one, two, three, who should do it? Let's take Tom." This is how Tom became the CTO. Very pragmatic.'* (I-7). Consequently, they appointed one of their developers as CTO in order to satisfy their potential investors. Although problems eventually arose with this CTO, the two initial co-founders could not replace him before the next funding round closed because that would send *'the wrong signal to investors at this point in time, because they are supposed to be investing in the current team.'* (I-8). This demonstrates that the team must appear competent, stable, and harmonious to investors. Therefore, a strong founding team with diverse competencies is an important signal of quality that helps acquire investment from the Berlin ecosystem because it gives confidence in the start-up's ability to succeed.

Co-founders are typically found within one's personal network, which means that the entrepreneur's personal network both constrains and enables the search for potential co-founders (Aldrich and Kim, 2007; Ruef, 2010; Scheidgen, 2019). If an entrepreneur does not have any people in their network who they would consider a suitable candidate, they are faced with a significant entry barrier, which may prevent them from accessing the local ecosystem's

financial capital. Nevertheless, it is arguably less resource-intensive to form a convincing team than to achieve traction.

Fulfilling the team criterion enables the start-up to access risk investment from the outset. Whilst proof of concept is not required at this stage, the viability of the business idea in the future needs to be addressed. As one of the founders of MedicsApp explains, in order to acquire first external funding, entrepreneurs need to be able to convincingly argue that the product will be able to generate revenue in the future: *'When do you get money? You only get money if there is a market and if you really have a business case that promises that the revenues will come at some point. Otherwise, you won't get money.'* (I-20). Accordingly, it is sufficient that the business model promises to generate revenues *'at some point'* (I-20). In contrast, in Silicon Valley this must already be accomplished, as one Silicon Valley entrepreneur explains: *'[You have to] prove out your product and get to a point where you're actually in a position where you [have numbers]. If you're B2B, you have revenue. Or you're B2C and have a million users.'* (I-64). Therefore, risk investment can be acquired much earlier in Berlin and requires much less mobilization of private money than in Silicon Valley, provided that the founding team is strong.

6. Discussion

Overall, our findings shows that there are uneven entry thresholds between the Silicon Valley and Berlin ecosystems in terms of securing equity finance. In Silicon Valley, companies must demonstrate sufficient *venture traction*, whereas in Berlin they need to have a strong *founding team* in place. In other words, in order to raise funding, Silicon Valley companies must reach a much more advanced stage in their development compared to their Berlin counterparts. As a result, there is a very different threshold at which companies become investable. This has four key implications for the entrepreneurial ecosystem debate.

6.1. Unequal ecosystem entry thresholds exclude certain entrepreneurs

First of all, our findings raise an important question: What type of entrepreneurs are able to meet the anticipated investment criteria to access ecosystem resources? Several entrepreneurship debates more or less implicitly argue that not everyone can equally participate in entrepreneurial activities. For example, immigrant entrepreneurs might face particular

challenges when starting their business (Lassalle and Johnston, 2018), or women entrepreneurs might struggle to secure investment (Balachandra et al., 2019). Thus, unequal starting conditions shape if and how aspiring entrepreneurs can start their entrepreneurial journey, as entrepreneurs have highly unequal resources at hand (Stamm et al., forthcoming). This includes not only the possession of and access to financial resources, but also education, knowledge, and various tangible resources necessary to start a particular business. However, from an entrepreneurial ecosystem perspective, this unequal accessibility of resources has not yet been sufficiently addressed (Brush et al., 2019).

As a key contribution, our study addresses this gap by showing that ecosystem resources might not be as easily and equally accessible by all entrepreneurs in the same region as the entrepreneurial ecosystem debate more or less implicitly argues (Cao and Shi, 2021). Accessing the resources provided by the ecosystem might itself require comprehensive resources, yet not all entrepreneurs can become part of the game. Silicon Valley excludes entrepreneurs who do not manage to mobilize 100.000 to 500.000 USD of seed capital from their own savings or family and friends. Inequality among entrepreneurs then has a significant impact on who can actually embed themselves within the ecosystem and thus access its resources. In Berlin, in contrast, the threshold is much lower, yet it still has some preconditions. For example, there is a bias towards founders with university degrees and especially white males in their early thirties (BSM, 2018). However, personal savings of about half a million USD are not necessary since the ecosystem provides funding from a very early stage, sometimes even from the very first day. This makes the resources of the Berlin ecosystem accessible to entrepreneurs who cannot afford to risk their savings or forego their salary.

Although Silicon Valley has been described as a *‘powerful magnet for ready-made entrepreneurs, who flock there from around the globe’* (Isenberg, 2010), our findings put this statement into perspective: it becomes apparent that it is not a magnet for each and every entrepreneur. Silicon Valley is a powerful magnet for wealthy and successful entrepreneurs from around the globe. This, in turn, reinforces the selectivity of Silicon Valley and might contribute to exacerbating the ecosystem entry threshold due to greater competition.

6.2. Similarity among start-ups within and between ecosystems

Entrepreneurs in both entrepreneurial ecosystems have developed a shared understanding about investors' evaluation criteria, which effectively function as filtration mechanisms that only select companies with the greatest likelihood of success (Prokop, 2021). This suggests that investors, who possess the most valuable resources, have significant power to determine the requirements by which entrepreneurs need to abide to secure their funding. Over time, this may lead to homophily and isomorphism whereby entrepreneurs may seek to meet the investors' expectations (DiMaggio and Powell, 1983). In doing so, they pursue the same 'success metrics' to secure their investment, and they may also start behaving in a similar manner to those entrepreneurs who have successfully raised finance in the past. This tendency towards homophily and isomorphism might be shaped more strongly by the more powerful actors within the entrepreneurial ecosystem. Yet, the literature has paid rather little attention to power relations within ecosystems. Although a few studies indicate the powerful role of investors (Ferrary and Granovetter, 2009; McCahery and Vermeulen, 2010), the various ecosystem actors are mostly treated as equally powerful. Our findings underscore the necessity to pay more attention to the impact of powerful vs. less powerful actors within the ecosystem in shaping not only the ecosystem, but also entrepreneurial processes and ecosystem entry thresholds.

What is more, the tendency towards homophily and isomorphism may also be at play not only within the local ecosystem but also in relation to other ecosystems whereby ambitious entrepreneurs from ecosystems such as Berlin, who aspire to eventually relocate to Silicon Valley, may mimic the behaviour, language, and ways of doing business that would be appropriate for Silicon Valley as a way of gaining legitimacy. Yet, they also need to maintain legitimacy within their 'home' ecosystem which requires a great degree of ambidexterity to balance potentially competing demands and legitimacy signals.

6.3. Risking personal vs. ecosystem resources

Berlin-based entrepreneurs are able to seek ecosystem resources, such as external investment, at the very early stage of their entrepreneurial journey, whereas their Silicon Valley counterparts do not have access to these resources until the start-up has proven its traction. This has important implications for the (reproduction of) ecosystem resources.

Berlin entrepreneurs rely on ecosystem resources from the outset. This is a risky proposition for the ecosystem given the lack of evidence of the viability of the business idea. Since investors

are unable to rely on metrics pertaining to the venture's traction, they need to use another evaluation criterion which may explain why they focus on the quality of the founding team. Nevertheless, there is still a tremendous amount of risk involved for the investors while they wait to see whether their investee company does indeed manage to prove its traction. Inevitably, there will be a high number of companies that fail in the process. But when they fail, they not only lose the investors' money, but they also cause a net financial loss for the ecosystem. Whilst the entrepreneur may still go on to launch another venture and capitalize on their lessons learned and succeed the next time around, the financial investment that was injected into the failed venture will nonetheless drain the overall pool of available resources in the ecosystem.

In Silicon Valley, in contrast, ecosystem resources only come into play at a comparatively late stage – the venture has to demonstrate its product-market fit, secure paying customers, and generally prove its traction. At this point, there are relatively good odds of the business continuing to do well and leading to an eventual exit for the entrepreneur and their investors. When an exit occurs and shareholders cash out, this increases the available resources in the ecosystem through the process of entrepreneurial recycling (Bahrami and Evans, 1995; Spigel and Vinodrai, 2021). In contrast, if a venture fails in the process of trying to demonstrate traction, it fails without draining any resources from the ecosystem because it will have been funded predominantly by the founding team rather than Silicon Valley investors. In other words, if a venture fails in its early stages, it fails at a personal cost to the founders, but it does not harm the pool of resources available in the Silicon Valley ecosystem, and if it succeeds, it injects additional resources which can then be used to fund other businesses with the potential to succeed, since they have to show traction again.

Taken together, this means that Berlin's ecosystem resources are at stake from a much earlier and riskier point in time, whereas Silicon Valley's resources are protected until the potential investee company has somewhat de-risked itself by proving its traction. What is more, Silicon Valley entrepreneurs face the potential negative financial consequences in a personal capacity because it is their own money at risk, meanwhile Berlin entrepreneurs offload the risk onto their investors and therefore the ecosystem. On the one hand, the Silicon Valley model prevents the drain of resources from the ecosystem, but on the other, it is a considerably unequal modus operandi because its entrepreneurs face high ecosystem entry thresholds when attempting to launch and run a high-growth company. In a way, Silicon Valley entrepreneurs can only sit at the proverbial poker table if they can afford the massive buy-in of half a million dollars or possibly even more.

6.4. Demystifying Silicon Valley: How other entrepreneurial ecosystems feed into Silicon Valley's success

Given that Silicon Valley is the perceived 'holy grail' of the start-up world, many entrepreneurs aspire to operate from the area (Isenberg, 2010). However, not all entrepreneurs actually start their journey in Silicon Valley. Instead, some entrepreneurs start in other ecosystems, but over time move from their 'home' ecosystem to Silicon Valley, as was the case with ProHealth. This suggests that some ecosystems 'feed into' Silicon Valley. In doing so, the feeder ecosystems help elevate companies from the very early stage to a point where they are established and legitimate enough to compete for resources in even more mature ecosystems, which are better able to support the next stage of their growth.

However, in order to enter the Silicon Valley ecosystem and establish themselves as legitimate start-ups, companies need to reach a certain stage of development. This suggests that only the most established and already-proven companies are able to move to Silicon Valley. In a way, the 'feeder' ecosystems operate as stepping stones that help incubate early-stage companies, establish strong foundations for the new ventures, and start them on a growth trajectory. Yet, when an exit occurs, it is Silicon Valley that reaps the biggest rewards.

This then gives Silicon Valley the considerable advantage of attracting the best of the best, which in turn allows its investors to be rather selective about the companies they consider worth investing in. Silicon Valley is a notoriously expensive place for both companies to hire talent and for the employees themselves to live in. Only the most successful start-ups—or at least those with the deepest pockets or most resources—can afford to be located there. As such, Silicon Valley is the Olympic Games of the start-up world where the competing companies are the ones that have either already passed the 'qualifying standards' in their 'home' ecosystem before moving to Silicon Valley or have been incubated locally and managed to demonstrate traction in Silicon Valley.

7. Conclusion: Demystifying a vivid dream of Silicon Valley entrepreneurship

Silicon Valley is celebrated as the leading ecosystem, capable of producing extraordinary rates of high-growth entrepreneurship. One of the positive implications of its high selectiveness is that only the most promising ideas get funded which attracts the most successful entrepreneurs from all over the world. But at the same time, it excludes many (potential) entrepreneurs who

are unable to secure the necessary seed capital and thus reproduces inequalities. Hence, ecosystem resources are by far not accessible by each and every (nascent) entrepreneur.

Silicon Valley forces entrepreneurs to take significant personal risk. This risk-taking culture is often discussed as a very positive factor for innovation and ground-breaking technological inventions. Yet, at the same time, it also means that if entrepreneurs fail, they might lose their house, their children's college fund, or their retirement savings. The Berlin ecosystem, in contrast, might not develop as radical innovations as Silicon Valley does (GEM, 2021; GII, 2021), but it also does not expect such high personal risks.

Additionally, ecosystem entry thresholds may impact the evolution of entrepreneurial ecosystems. As discussed before, ecosystems with high entry thresholds protect their resources from early-stage risk and may therefore accumulate recycled resources at a quicker pace than ecosystems with low entry thresholds. Not only does this make the differences in resources endowments between ecosystems more pronounced, but it also begs the question whether some ecosystems may have a 'glass ceiling', which prevents them from generating greater rates of entrepreneurial activity. Consequently, they might evolve along different success trajectories, which in turn influences how one particular ecosystem can actually promote entrepreneurship.

To fully understand how entrepreneurial ecosystems promote—and also hinder—the entrepreneurial activities of certain founders, we cannot only focus on the positive impact of ecosystems for venture growth. We also need to consider how inclusive or exclusive they are. Our findings underscore the necessity to have a closer look at the other side of the coin, beyond the glamorous success stories, and also analyse the downsides and inequalities reproduced within as well as between entrepreneurial ecosystems.

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Figure

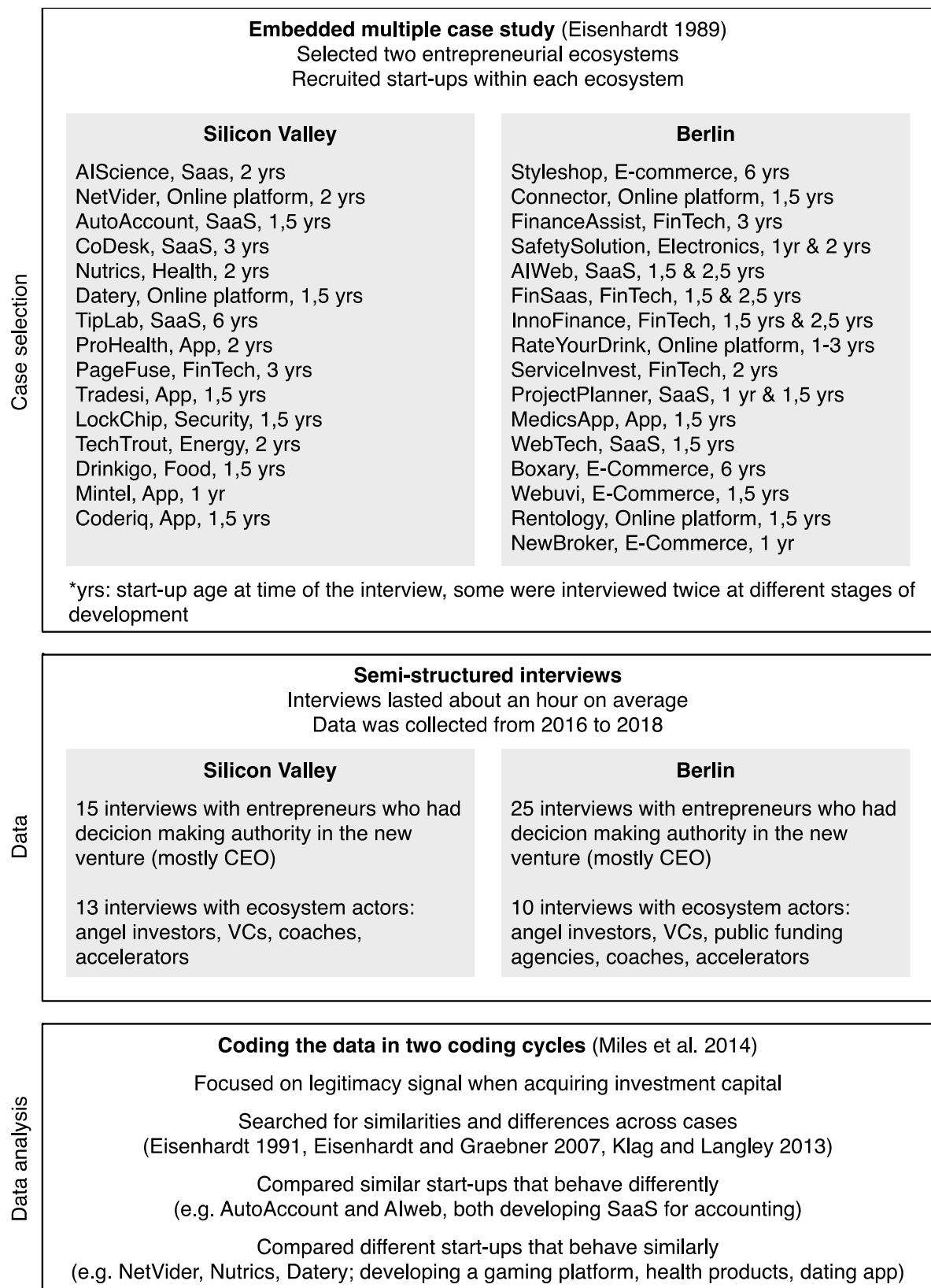


Figure 1: Data collection and analysis approach