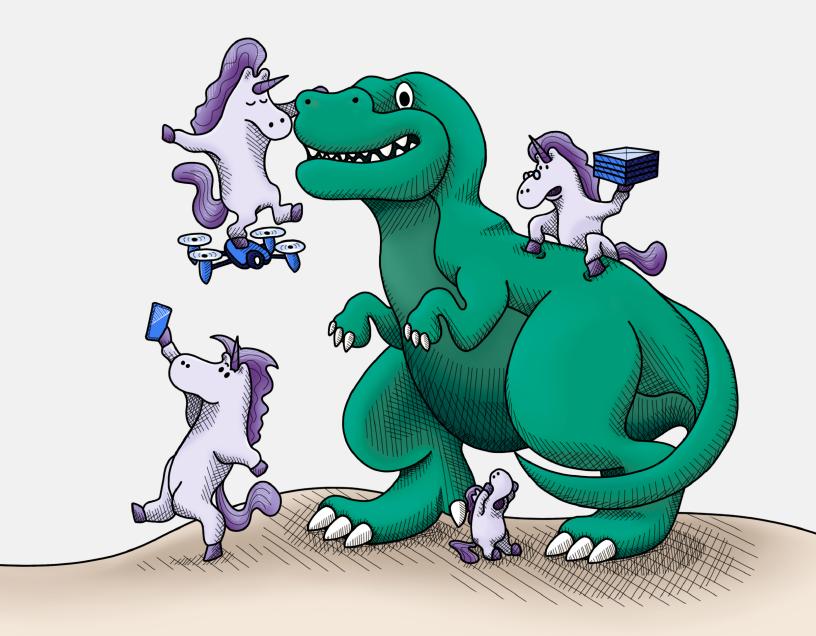




Join the club.



We connect the largest corporations to the best startups in their industry. It's time you joined the club.

PLUGANDPLAY

plugandplaytechcenter.com

Credits & contact



PLUGANDPLAY

Contents

Introduction	3	PitchBook Data, Inc.
Overview	4-6	John Gabbert Founder, CEO Adley Bowden Vice President,
Plug and Play Tech Center Q&A: VC in the age of unicorns	7-8	Market Development & Analysis
Unicorn financing metrics	9	Content
Spotlight: Foreign and tourist investors	10-11	Garrett James Black Senior Manager Custom Research and Publishing Bryan Hanson Lead Data Analyst
Valuation growth	12-13	Di yan manasin Zeda Bata / manyat
Exits	14	Contact PitchBook
	1-7	Research reports@pitchbook.com
		Report design by Conor Hamill
		Click here for PitchBook's report methodologies.

Introduction

The unicorn phenomenon plays a key role in the advancing confluence between private and public markets. In hindsight, it makes sense that eventually it would be possible for private companies to scale to a billion-dollar valuation, as long as investors were amenable. However, such a metric for companies on the younger side—less than a decade old—has only occurred in this volume in a unique financial market climate. Never has the cost of capital remained so low for so long. Moreover, with allocations increasing to alternative investments, especially PE and VC, investors have more capital to dispense than ever before in such ventures. Unicorns have not yet undergone a complete turn of a market cycle and survived. Normal market processes have already led to some failing or approaching failure, such as Blue Apron, but in the generally balmy market climate, few have experienced significant stresses. Current unicorns will be truly tested by a significant market shock, which, given that nearly all have only existed within one of the largest bull markets in history, would present a challenge most have yet to face. It is difficult to envision any waning in investor willingness to fund companies to unicorn status unless there are significant market shocks to derail investing activity. The incentives for early exposure to rapidly growing, mature companies are still intact, especially given that several have validated their valuations in

public debuts this year. The common limiting factor is the number of investment firms that have the resources and wherewithal to take on the inherent risk and potential outsized reward. There are enough such firms, especially as VC grows more institutionalized.

With those imperatives in place and current market conditions—despite concern about a supposed imminent recession—looking to persist, unicorns aren't going away anytime soon. With that said, delving deeper into the characteristics of the existing herd of unicorns can reveal clues to help evaluate their future development and the potential for new entrants.



Garrett James Black Senior Manager, Custom Research and Publishing





Overview

Unicorns retain record value tallies

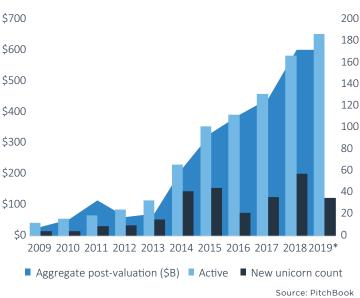
At midyear, there were 187 active unicorns in the US. Together they boast an aggregate private valuation of just over \$600 billion, a staggering sum even more striking because it is actually down by several hundred million dollars from the respective peak of \$603.3 billion in 2018. Two observations must be made about that minimal decline: first, it is a sign of successful exits; second, maintaining that massive figure midway through the year even given huge debuts by Uber and Zoom signal that aggregate unicorn valuations could still hit a new high this year.

Further unpacking that valuation, when segmenting out unicorns that are at least three years old, it's striking how much of the total capital raised has concentrated in existing companies, further fueling their growth. By 2019 YTD, extant unicorns raked in \$43.1 billion over the course of their collective lifecycles. This is a clear case of doubling down and ensuring businesses have more than enough capital to expand in order to

Unicorn aggregate valuation holds steady at \$600B+ for second year in a row, signaling successful exits with more to come.

cement a commanding position in their given market. Massive sums always incur opportunity costs—could that capital have fueled the development of that many more, somewhat smaller companies? Such tradeoffs must be recalled when analyzing existing unicorns. At such stratospheric valuations, capital efficiency matters, even in a world of cheap and abundant capital. Therefore, there have been signs of investors starting to focus more on enterprise-dedicated platforms, which can proffer clearer pathways to profitability given larger markets. Although skewed by three outlier financings to a large degree, and thus a clear trend has yet to emerge at the unicorn level, commercial services unicorns raked in a record \$6.7 billion so far in 2019.

Unicorn count and aggregate post-money valuation



Source: PitchBook *As of June 30, 2019 | Geography: US

Unicorn count and aggregate post-money valuation by active unicorns 3+ years old

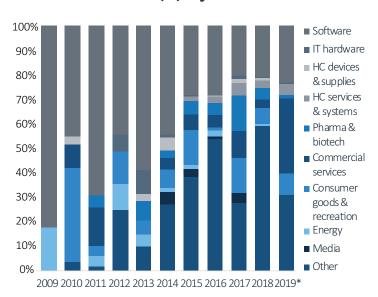




Enterprise-focused unicorns are currently more in vogue given the unique challenges within the consumer space.

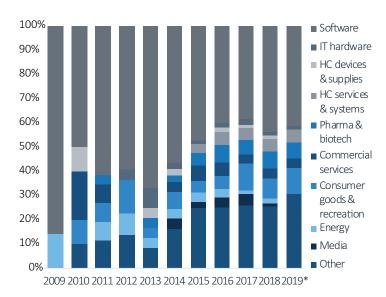
Interestingly, there is a growing disparity between the amount of capital absorbed by existing unicorns versus those invested in unicorn minting rounds. 2018 saw the largest such disparity, with \$32.9 billion collected by existing unicorns and initial financings accounting for \$13.0 billion. Bearing in mind that it is difficult to conclusively determine trends given unicorns' nascency, that disparity shrank somewhat in the first half of 2019, but still is on pace for a significant gap. While this makes sense due to the amount of capital required to scale, the initial unicorn financing size seems to be plateauing across the venture market. Simultaneously, the pace of subsequent unicorn financings appears to be accelerating, with 40 by midyear compared to a year total of 68 in 2018 and 45 in 2017. Moreover, there are 71 unicorns in the US that are less than one year old, 55 between one and three years, and 52 between four and seven years of age. The making of unicorns appears to be solidifying, and even intensifying, as a definitive trend, but older unicorns are still commanding significant sums of capital invested.

VC unicorn deals (#) by sector



Source: PitchBook *As of June 30, 2019 | Geography: US

VC unicorn deals (\$) by sector



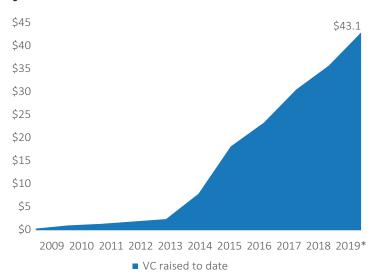
Source: PitchBook *As of June 30, 2019 | Geography: US

Active unicorns by time (years) since unicorn round

Age range	Unicorn count
<1	71
1-3	55
4-7	52
8-11	6
>12	2

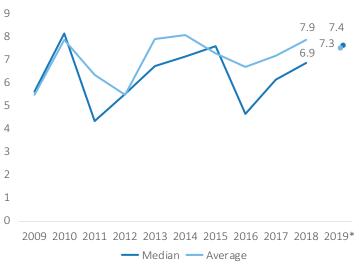


VC raised (\$B) by active unicorns 3+ years old



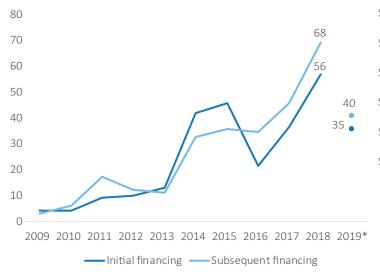
Source: PitchBook *As of June 30, 2019 | Geography: US

Median and average years from founding to unicorn status



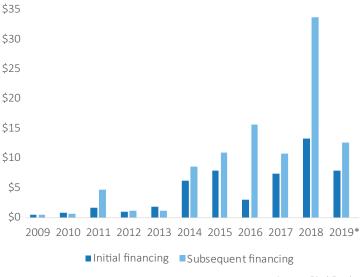
Source: PitchBook *As of June 30, 2019 | Geography: US

Initial unicorn financing versus subsequent unicorn financings (#)



Source: PitchBook *As of June 30, 2019 | Geography: US

Initial unicorn financing versus subsequent unicorn financings (\$B)







Plug & Play Tech Center Q&A: VC in the age of unicorns

Given Plug and Play's disparate programs and platforms, let's tackle the investment side and accelerator programs in tandem. We've seen a spate of unicorn debuts this year, as well as ongoing, steady increases in the population of unicorns worldwide. How have the earliest stages of the investment cycle evolved in response, even at a remove? What about accelerator programs, and the interplay between the two?

We believe the old accelerator model is fading. Getting 5% or 7% does not justify the help the startup gets. Frankly, we now call Plug and Play's role an innovation platform, wherein early-stage startups get assistance as well as funding from us and our venture and angel community. In addition, we also participate from seed to Series A and B rounds, helping companies scale worldwide. Across our sites in places such as Shanghai, Beijing, Singapore, Frankfurt, Munich and the Valley, we can help startups obtain clients worldwide, expand teams and enter new markets.

Recently some of our analyst research has focused on the role that large, mature, venture-backed companies play in backing or acquiring early-stage companies even prior to their own official exit events (e.g. Uber buying Jump Bikes). What are your thoughts on this phenomenon and how efficient of a market mechanism it is?

The biggest acquirers of tech companies worldwide are the existing tech giants (e.g. Facebook or Google). The role that Google played in helping scale the businesses they acquired—such as YouTube or Android—was critical. On its own, Android would not have become the dominant operating system for mobile. Of our portfolio, roughly eight out of 10 startups go through an acquisition rather than proceed all the way to public exits. The fact that M&A accounts for most startup exits is nothing new, but now we are seeing an accelerated rate of this process given the existence of unicorns and tech giants. In short, it's a positive phenomenon for helping grow the tech ecosystem.

More unicorns are proliferating globally, albeit sporadically and usually in small numbers compared to initial geographic concentrations; given Plug and Play's worldwide presence, what are your thoughts around the trend of increasing cross-border venture investment, both



Saeed Amidi

CEO & Founder

Saeed Amidi is also General Partner in Amidzad. The fund has been investing in technology companies for over 15 years and holds investments in over 1,000 technology companies, including: PayPal, Danger, Powerset and DropBox.

As a serial entrepreneur and a seasoned executive with over 28 years of experience in operating and growing successful companies, Saeed has successfully started businesses both nationally and internationally.

intranationally and internationally? How about early stage versus late stage, in that breakdown?

Thus far in 2019, we've seen two companies with which we were involved become unicorns: N26 in Germany and Rappi in Colombia. We anticipate more unicorns in emerging regions, such as the Asia-Pacific region, but the center of gravity remains mainly in northern California. So, I expect the largest production of unicorns will be located around that center of gravity. Now, however, the method will be different. The next giant tech companies will be a pure disruption of traditional businesses through the application of technology rather than being primarily driven by a new type of technology or market. Flexport is a good example of this; although it remains to be seen whether they can pull it off, the company is looking to disrupt the global freight and shipping business.

What's your take on trends across sectors? It appears the volatility in consumer-focused outcomes seems to be even more pronounced, judging by higher-profile troubles such as with the Honest Company versus, say, Beyond Meat.

We've been involved with direct-to-consumer (D2C) platforms before, such as Honey, and we were involved with Beyond Meat when its valuation was \$300 million. Regarding Beyond Meat, it is a feat that a company with less than \$100 million in revenue predicated on a technology of blending different types of vegetables and



Plug & Play Tech Center Q&A: VC in the age of unicorns

chemicals to create their product was able to achieve that valuation. Granted, their distribution and partnership deals have been extensive. Now, the pressure is on them to execute, and go from dozens of millions of dollars in revenue to billions. At that level, they'll be able to justify their valuation. They don't want to end up as another Webvan, which at one point was worth more than all the grocery stores in the US combined. Webvan never delivered on that promise, but Amazon Fresh eventually did. As often is the case with D2C companies, there can be great ideas, but they must execute to be able to justify these optimistic valuations.

From the perspective of an early-stage investor, how have anti-dilutive protections and other rights evolved over the years, given broader industry dynamics?

We invest in over 150 companies a year. Anti-dilution clauses are nonsense. We are much more interested in expanding the pie rather than protecting our 1%-2% of a startup. It's still true that we should be rewarded for being an early investor, just like other firms should, but not at the cost of your relationship with the company. Some entrepreneurs are not experienced, and thus may end up signing a non-dilutive clause. If you really want marquee names and truly experienced VC firms on your term sheet, you should not sign non-dilutive term sheets at the early stage. We are fans of the vanilla scenario (i.e. the seed round should see about \$1 million, for no more than 10% of the company). For a Series A round, which should be between \$5 million and \$10 million, an entrepreneur should not give more than 15% of the company. Based on these scenarios, you can easily raise additional money as you create value. By avoiding terms such as non-dilutive or others that are more hindrances than help, you can focus on building out the company.

What is your opinion of the proliferating narrative of "the atomization of seed"?

The timing of seed versus Series A rounds are now increasingly diverging, and you see companies raising \$5 million or \$10 million and calling it a seed round. I like priced rounds—unless you do something like a simple agreement for future equity (SAFE)—and we always have a cap because I think that early-stage investors should be rewarded via a cap, as opposed to late-stage investors. Even those lines are becoming blurrier, given that we have hundreds of micro-VCs and more than a thousand corporate VCs. There is plenty of money available. You must always consider what the entrepreneur and the startup itself needs, and what someone can deliver beyond just capital.

Given exit trends thus far in 2019, and considering the scale of sums invested and growth in industry dry powder, how do you consider the exit cycle this year, and prospects looking forward?

Technology—or digital transformation—is going to disrupt every industry, similarly to how Uber has disrupted the transportation industry. People do not like to own cars anymore, especially if you're living in the city. Airbnb has disrupted—and grown—the hospitality industry. Consumers now expect solutions to be as easy as the way we use our iPhone or Android. That level of technology is shifting from consumers to B2B. We are now entering the era where automotive, energy and food industries will be transformed. For example, there are initial high-fliers like Beyond Meat, but the food industry overall has not changed that much yet. There is much more potential for additional exits, as large, traditional businesses may seek to buy startups to help acquire those capabilities.

Even within the past few weeks, I have seen requests to buy private shares of companies that were valued at \$100 million to \$200 million, and not close to an exit. There is much more opportunity via secondary sales to access a company well before an exit. Uber and Facebook, for example, saw their employees sell shares in secondary markets; VCs also had that option. We will see more of those events occurring, which will reshape our concept of exits. The secondary market is just the beginning. To use a personal example: I invested in N26 at a valuation of \$500,000, and when the valuation hit \$500 million, I presumed a 1,000x increase was pretty good, so I sold part of my holdings. Now, N26 is worth over \$3.5 billion.

Please feel free to expand upon any issues mentioned thus far, as well as address any others that have not yet been mentioned.

I would give anything to be 25 again and start a company. I used to tell people that if you wanted to do a startup, you had to come to Silicon Valley. Right now, however, there is much more startup and financing activity from Singapore to Munich. I truly believe that it's the best time in the world to be an entrepreneur. As for which sector I'd start a company in, I'd use mobile technology in combination with AI and machine learning to solve a real problem.





Unicorn financing metrics

Becoming a unicorn is pricier

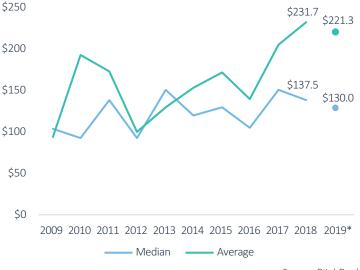
In addition to a stable initial round of financing, the median unicorn financing round (not necessarily their inaugural) has held relatively steady for years now, shifting between \$130 million and \$175 million since 2015. The exact figures for initial unicorn financing size indicate that, as inferred, the median has remained constant, though more outliers are creeping in and pushing the average to near an all-time high. The sums raised by companies before becoming a unicorn are also approaching all-time highs. It is more expensive to become a unicorn than ever before, with the median sum raised prior to the status-conferring round soaring to \$126.1 million in 1H 2019.

Median and average unicorn deal size (\$M)



Source: PitchBook *As of June 30, 2019 | Geography: US

Median and average unicorn deal size (\$M) at first financing



Source: PitchBook *As of June 30, 2019 | Geography: US

Median and average VC raised (\$M) prior to achieving unicorn status





Spotlight: Foreign and tourist investors

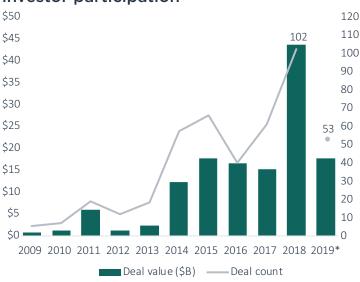
Tourist investors keep flocking

A key development in the formation of unicorns and their ongoing evolution has been the involvement of nontraditional VCs. In fact, the growth in participation by financial institutions of all types has been instrumental in venture's record heights of the past few years. For unicorns, the added financial heft has enabled record investment sums. 2018 saw a peak of \$43.5 billion invested across just over 100 transactions, while the first half of 2019 is going strong at \$17.7 billion invested and 53 completed financings of unicorns both old and new.

The unicorn phenomenon contributed significantly to the ongoing globalization of VC.

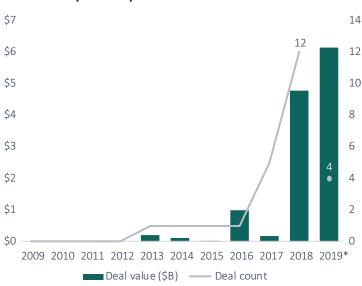
There is a confluence between nontraditional firms and foreign investors, both of which fueled unicorn financing rates the last eighteen months. 12 deals worth a total of \$4.8 billion closed in 2018 with only foreign investor participation; even more capital has been infused in 2019 to date, to the tune of over \$6 billion. VC is globalizing as nontraditional and foreign players seek exposure to fast-growing tech companies in order to diversify their own portfolios. SoftBank is the supersized poster child of this trend. One key reason behind the significant rampup in the recent past is the growing acceptance and usage of secondary markets in order to obtain liquidity. Although nontraditional players are willing to forego the levels of liquidity in equities or bonds, they must still have recourse to some degree of liquidity, while companies themselves need to pay out long-tenured employees and earliest investors. In some secondary transactions, foreign and nontraditional players are the buvers, whereas earlier investors are the sellers, but there's no reason that process can't repeat down the line. It's important to emphasize that multiple companies are now increasingly comfortable buying and selling the securities of large, privately held companies in private transactions at the scale of billions of dollars.

VC unicorn deal activity with tourist investor participation



Source: PitchBook *As of June 30, 2019 | Geography: US

VC unicorn deal activity with only foreign investor participation

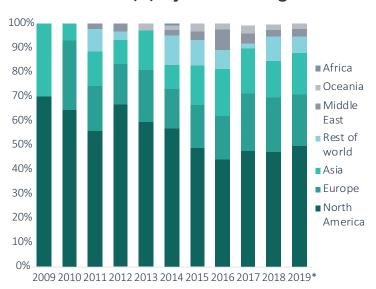




Innovative forms of liquidity for unicorns in private markets will be as important as equivalent measures of liquidity and/or control for large public companies.

While risky and infrequent, these transactions will help enable the continued existence of unicorns. That way additional nontraditional players—often involved in large secondary transactions—can get a piece of rapidly expanding companies at both parties' discretion. This strategy will most likely grow in popularity, though given the relatively small numbers of companies eligible for such deals, will still be relatively infrequent compared to broader VC's flood of funding.

Unicorn deals (#) by investor region







Valuation growth

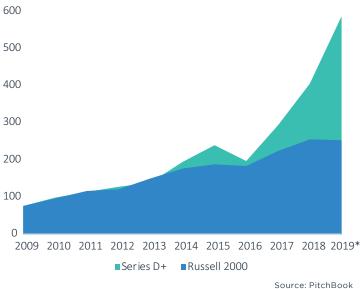
Value creation is tilting private

While an admittedly rough heuristic, it's useful to compare just how much late-stage valuations have grown relative to the Russell 2000, the small-cap stock market index. The surge in private growth has created a zone for large, privately owned companies to blend the characteristics of private and public companies, as illustrated in Uber's quarterly reports even before its public listing. This trend also aligns neatly with the contraction in the universe of stocks, driven primarily by the shrinking of the number of small-cap, publically traded businesses.

Against that backdrop of surging growth, step-ups between pre-unicorn and unicorn financings have held steady for years now. While sample sizes are small, this trend indicates that the unicorn model is becoming more stable, highlighted by the fact that companies typically double their valuation in between those two financing rounds. The emergence of meaningful patterns allows for more characteristics to be assessed and can better establish the general pathway to becoming a unicorn.

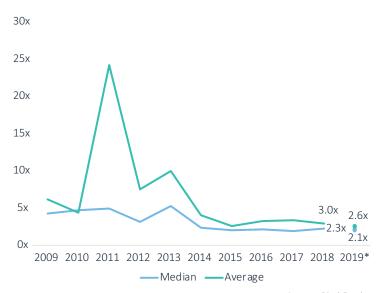
Additional useful datasets hint at potential relationships between pre-money valuations, unicorn financing size and total VC raised. Most unicorn-minting rounds are clustered between \$100 million and \$500 million, usually generating valuations below \$2 billion; all this is unsurprising. What is interesting, however, is how much VC-backed companies raise in total prior to the unicorn round charted versus the pre-money valuation of their unicorn round. The noise of this dataset grows significantly, with many companies raising hundreds of millions of dollars before becoming a unicorn; the bulk are reasonably efficient, raising between tens of millions to \$200 million in order to notch that coveted billion-dollar valuation. As more unicorns are created, better criteria for reasonable burn rates will be available for investors, although this data will be sector and business model dependent.

Median Series D+ valuation growth versus Russell 2000



*As of June 30, 2019 | Geography: US

Median and average valuation step-up between pre-unicorn and unicorn VC deals







Unicorn deal size (\$M) versus unicorn pre-money valuation (\$B)



Source: PitchBook *As of June 30, 2019 | Geography: US

Total VC raised to date (\$M) prior to unicorn round versus unicorn pre-money valuation (\$B)







Exits

Exit value surges more than threefold

This year has already seen a record for unicorn exits in value, with close to \$160 billion realized across only 14 acquisitions or IPOs. Of course, these figures are skewed by Uber or Lyft-however, these companies demonstrate the goal of unicorns to create massive value and generate outsized returns throughout their life cycle and eventual exit. Across these 14 exits, there has already been \$15.3 billion in acquisitions of unicorns and \$142.0 billion in IPO exit value.

It is not unreasonable to expect even unicorns will become the targets of corporate acquirers in coming years to a greater extent than seen before.

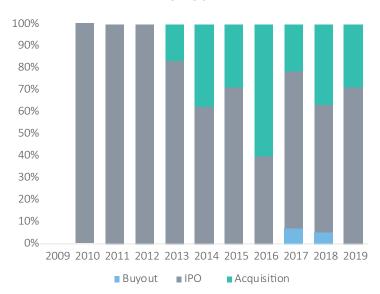
Due to their size, most unicorns are not M&A targets, but tech giants have enough cash to buy them (e.g. SAP's acquisition of Qualtrics). It is not unreasonable to anticipate an uptick in unicorn M&A this year. Some unicorns will keep utilizing routes to partial liquidity such as secondary markets—but as the population of unicorns continues to grow and dozens grow older without achieving an exit event, it is likely some will eventually seek sales to relevant buyers.

Unicorn exit activity



Source: PitchBook *As of June 30, 2019 | Geography: US

Unicorn exits (#) by type



in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, Inc. Contents are based on information from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. Nothing herein should be construed as any past, current or future recommendation to buy or sell any security or an offer to sell, or a solicitation of an offer to buy any security. This material does not purport to contain all of the information that a prospective investor may wish to consider and is not to be relied upon as such or used in substitution for the exercise of independent judgment.