IN THE BUILT WORLD
VENTURE IN THE BUILT WORLD

2018 is shaping up to become the year of the built industry tech venture boom. Just ten years ago, there were a measly two construction technology investments totaling $4.5 million. Closing out 2017, these numbers soared to 40 deals with a price tag of $538 million, according to Pitchbook.[1] With our current trajectory, we are on pace to surpass these numbers by the end of 2018, breaching the barrier of one billion invested dollars.

You might be asking, why is there so much interest in built industry tech recently? The construction industry is fast approaching $1.5 trillion, while real estate accounts for nearly 11% of U.S. GDP.[2] These enormous markets have seen an influx of innovation as our cities and built environment continue to be strained by outdated processes.

The construction technology industry includes a variety of companies creating software and hardware solutions related to the construction process. Recent innovations have emphasized project management software, drone technology, and augmented reality, among others. The real estate technology industry has pushed real estate professionals into the virtual age with new immersive adaptations to existing workflows.

CONSTRUCTION TECH ANNUAL GLOBAL FINANCING

"We have crossed a threshold so there is no turning back when it comes to the application of technology in the built world.”

– Jesse Devitte, Managing Director and Co-founder, Borealis Ventures

VENTURE DEFINITIONS[3]

BOOTSTRAPPING
Without any outside help from investors, an individual who has chosen to bootstrap their startup maintains all control within the company as they are relying solely on personal finances and business revenue.

LOANS
Despite venture capital acting as a loan in some cases, the two sources differ in that venture investment carries no contractual obligation to be paid back with interest. Often a loan is backed by either assets or receivables that give the lender a safety net to recoup some of their investment in the case that the lendee fails to pay back the loan due to default.

ACCELERATORS
Think of these as more of a curriculum-based learning program in which startups receive mentorship, education, and networking opportunities. Typically in the early-stage of a startup life, accelerators assist in discovering a product-market fit. [Learn more here].

ANGEL FUNDING OR SEED CAPITAL
Venture capital is not typically used for early stage funding. Venture firms will get involved during the Series A round funding, where angel investors and seed stage financing invest alongside friends and family during Series AA or Pre-A funding. Due to the early stage of angel funding, deal structures can be slightly less structured and come in the form of convertible notes or simple agreements for future equity, both promising equity at a later date.

PRIVATE EQUITY
There are a few differences between venture capital and private equity: PE invests in more established companies that are struggling and therefore work with the company to improve operations and efficiencies, ultimately lifting the companies’ bottom line. In order to make the largest impact on the business, private equity firms often purchase a majority ownership in a business, unlike venture firms.

STRATEGIC INVESTMENTS
Mutually beneficial partnerships developed between startups and more established companies. These joint ventures allow for strategic investors to influence company decisions to guide a startup through different markets from first-hand experience.
The truth is, investment funds flowing into an individual company means so much more than the transaction itself: an influx of dollars impacts perception of the industry as a whole. As we see greater investment in built industry tech, innovation and emerging technology have been established as industry-wide priorities, making creativity a driving force for technology and industry players alike.

But before we can dive into how venture investment is changing the built environment, we must first understand the complexities of this funding vehicle.

**VENTURE VERSUS THE WORLD**

Venture capital is (often) financial capital provided to private startup companies considered to have long-term growth potential. This funding generally comes from an individual (venture capitalist) or an institution (venture capital firm). However, in many cases, the value of venture capital lies within the relationships and guidance that an individual or institution brings to a startup outside of financial funding.

Providing venture capital to a startup is a risk-return tradeoff, largely justified by the potential for above-average returns. For most young companies, venture capital has become a popular source of raising capital, although it often comes at the cost of company equity and diluted ownership.

The process that a startup takes in order go from an idea to a public company can be riddled with headwinds. But in general, each follows a similar structure: (1) they receive funding from angel investors, friends, and family, each forming a company’s seed capital; (2) then they start the rounds of venture funding beginning with series A; (3) then onto series B; (4) series C and any additional rounds needed; (5) before going through a mezzanine financing round, a combination of equity and debt financing, which often comes before an (6) initial public offering. This capital timeline involves the sale of large ownership chunks of a company to a select few investors, commonly referred to as limited partnerships. Limited partnerships involve two or more parties that unite to conduct mutually beneficial business where each party involved is only liable for the amount of money that they have invested. The benefit? Each limited partner holds a piece of ownership providing them access to the portion of the income that the business creates.
This stage of funding recognizes a company with some form of momentum and a minimum viable product (MVP), the simplest form of a product or service that can be released. Few investors get involved at this time, often waiting until there is proof of proper execution. The focus at this stage is figuring out your product’s fit within the larger marketplace. Investors at this stage include angel investors and other early stage venture firms looking to see plans for expansive growth within the business plan. Dollars invested will typically range from $500,000 to $2 million in this stage.

Series A funding is the time to shape and mold the long-term business plan while proving a track record of success with your product. This is what most people recognize when they hear about venture capital investments. Think of the series A phase as the time to optimize your product through testing as your business is teeming with cash, usually for the first time. Typically $2 million to $15 million is raised in this stage (this number has risen over the past few years as unicorns have become more frequent).

WHAT IS A UNICORN?

A unicorn is not a mythical horse-like animal with a horn, but instead a startup valued at over $1 billion. This recent term came about in the past five years for several reasons, including: an increase in company buyouts as larger organizations look to grow capabilities through acquisition rather than investing in R&D; significant private capital availability leading to limited benefits of initial public offerings; and the increased popularity in social media channels allowing startups to reach broader audiences faster and with fewer hurdles.

According to PitchBook’s 2018 Unicorn Report, unicorns in the U.S. have raised $19.2 billion in venture capital funding in just the first seven months of the year, keeping pace to reach nearly $33 billion by the end of the year. Notable unicorns include Uber (worth $68 billion), Airbnb (worth $30 billion), WeWork (worth $17 billion), Pinterest (worth $12 billion), and SpaceX (worth $12 billion).

One of the biggest unicorns in construction technology today is construction supply company Katerra, who has raised $1.1 billion thus far including its staggering $865 million series D funding in January 2018, reaching an estimated current valuation of $3.0 billion. Since its founding in 2015, the company took just 25 months to reach its unicorn status making it one of the fastest unicorns in history.
### B

The series B funding round is all about implementing what you learned about your target customers from previous funding, and using those insights to scale. Dollars raised in series B go toward business development, sales, advertising, and people, all of which require significant capital. Venture investors at this stage have a better understanding of what the future of the company holds and expect a certain growth rate. We'll also see different venture players getting involved who have more expertise in later-stage investing. Typically $7 million to $10 million is raised in this stage, but that can vary drastically based on business model and previous success in earlier funding rounds.

### C

Companies that reach series C funding should have their product, service and general business well-defined. This is the time to expand your business. We often see mergers and acquisitions blossoming in this stage as a way to introduce new customers or reach additional markets. Given the more established nature of the business at this time, there is less risk associated with an investment and as such, more, and often larger and more established, investors become interested. Typical capital raised in this stage is more case-by-case dependent on business and the results of stages A and B. Additional letters just mean the company needs further funding rounds prior to going public or becoming a self-sustaining private company. However, often past this time there is little equity to give away, but that is not to say that it cannot happen.

### MEZZANINE

Certainly less common but nevertheless an option to most startups, mezzanine financing often takes place as a short-term solution prior to an initial public offering (IPO). Mezzanine financing offers preferred equity to the investor in the form of a loan, which gives them first access to earnings and assets in the case of liquidation. This does not come with voting shares and as such, does not dilute ownership as heavily.

### IPO

As the startup funding lifecycle comes to a close, it is common for it to lead into an initial public offering (IPO), where shares of a company are sold to the public in the form of equity in order to raise large sums of capital. However, in recent years, we’ve seen a significant shift away from this common step.

### THE SHIFT FROM IPO COMMONALITY

According to the National Bureau of Economic Statistics[^7], the number of publicly listed companies in the U.S. has dropped every year but one since 1997, falling from 7,500 to roughly half that amount in 2016. It seems that the benefits of becoming a public company just aren’t the same as they used to be, and in fact, an IPO can even hurt a private company. That being said, IPOs raise more capital than possible in any private funding round and offer the ability to throw large sums of capital into new products, growth strategies, and even pay back. In the past, companies emphasized investing in physical capital (warehouses, machinery, etc.) but today’s economy has seen a boom in technology and SaaS-implemented companies, which put the majority of their money into research and development (R&D). Public companies are required to disclose significant information leading to quite the dilemma for today’s largest companies: “Reveal too much, and competitors might steal your idea; disclose too little, and investor uncertainty will drag down your share price”[^8].

However, luckily there are billions of venture dollars floating around the private markets today, and startups and young private companies have found it easier to prove their value to a venture capital firm than to hundreds of thousands of public investors.
THE OTHER HAND IN THE DECK: STRATEGIC INVESTORS

We’ve talked a lot about traditional venture and venture-related investors, but there is another player on the field that has taken significant interest in the built environment: strategic investors. Strategic investors are corporations investing on behalf of their parent company. Everyone from Disney (Steamboat Ventures) to NBC (NBC Capital) have strategic arms of their business, but notable heavy hitters within the built environment include: Autodesk Forge, Caterpillar Ventures, GE Ventures, JE Dunn, and Stanley Ventures, among others. These investors not only have to balance the financial value-centric measurements of a startup, but also a more subjective, strategic criteria. How does this startup’s idea, product or service help ‘our’ business objectives?

A strategic investment often influences the decision-making by the startup to help guide it from the experience of an established company within the target market. To gain some context around this idea, let’s look into the most recent acquisition of Assemble Systems (‘Assemble’) by Autodesk. Assemble was brought on as a Forge Fund member in November 2017 after the Fund led the startups $12 million series A funding round, along with Satterfield and Assemble Investments. The goal of this investment was to connect with Autodesk’s BIM 360 construction management software, extending the capabilities of the platform into more of the pre-construction phase of a project’s workflow, bringing on new users and increased value. Assemble allows access to 3D models, 2D drawings and other pieces of project-related data while on the job site. But it is important to note that, as with all strategic investments, this was a mutually beneficial partnership. The investment allowed Assemble to double their team and better build out its integrations with Autodesk’s platform.[9] Just a short eight months later, and with no series B funding round, Autodesk announced the acquisition of Assemble, a move that solidified Autodesk’s commitment to rounding out its pre-construction expertise.[10] If we take a step back, let’s consider the investment, not only in dollar-value but in the amount of time that it would have taken to build these capabilities out in-house. This is exactly the reason that strategic investments take place: to help guide smaller companies making the change you’re looking for, and leverage that progress.

HOW DOES VENTURE CAPITAL HELP THE BUILT WORLD?

The built industry was built on siloed point solutions for local problems, and it makes sense. For example, in the U.S., there are over 750,000 contractors of various sizes and specialties.[11] With different rules and requirements in each country, region, city and district, it’s no wonder the industry has been stalled when it comes to innovation and change. It’s also understandable that disrupting this industry has not been easy. It will take internal change from those 750,000 contractors, public education institutions, and technology investors that are leading the charge.

The built world is ripe with development opportunities and venture capital is here to help. As we mentioned, more technology companies are reliant on private investments in order to keep on pace with growth targets, so our built industry startup companies are relying on venture capital now more than ever. And this is great news considering the influx of financial institutions focusing on the built environment through individual investments and built industry funds like the Fifth Wall Focus Fund, the Autodesk Forge Fund, Brick & Mortar’s AEC-focused fund, and many more headed our way.

“We have seen our sector’s first billion dollar exits in just the last four months... [and, partially driven by these checkbox milestones] we are seeing an increase in participation by later-stage investors.”

– Darren Bechtel, Founder & Managing Director, Brick & Mortar
The past decade has witnessed a surge of venture capital toward a variety of exciting built industry startups, with each company taking their own path based on a unique set of challenges to overcome and goals to meet. Construction collaboration software developer PlanGrid followed a path from leading accelerator Y Combinator through seed, series A, and series B rounds, raising a total of $69.1 million from a variety of investors since 2012. While companies often only go through two or three rounds of securing funding, it is not uncommon for that process to take a different shape; Procore Technologies’ $229 million raised since 2007 came through over the course of 7 rounds (led largely by ICONIQ Capital), and Rhumbix brought in $28.6 million in 5 total rounds (most recently, an $8 million corporate round with Autodesk).

As mentioned earlier, the venture funding process can sometimes lead to acquisition, and there have been a number of noteworthy such deals in our industry over the past several years. With 3 rounds and $240 million raised, Viewpoint was able to develop their innovative project management platform and position themselves for a $1.2 billion buyout with Trimble in April 2018. Similarly, Newforma leveraged a total of $25.1 million and their relationship with Borealis Ventures, resulting in an acquisition by Battery Ventures in August 2017. Whether the goal is to continue growing or to reach an acquisition deal, the construction startup landscape has been transformed by the resources and scope of venture capital.[19]

**CONCLUSION**

Venture capital in the built industry is not new. In fact, it has been around for decades. It might seem as though this recent boom in mergers, acquisitions and series of investments is all happening for the first time, and in fact, this is the first time that we have seen it in this volume. The reason? As Jesse Devitte of Borealis Ventures summarized, we are in the midst of a ‘perfect storm’ of private capital in abundance paired with the arrival of new technologies focused on the built environment. With leading venture capital firms like Sequoia, Bain, and Borealis, alongside notable strategic investors, the future of innovation in built industry tech is bright.
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