



**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# VC and AEC: How Construction Can Collaborate with Venture Capital and Startups

Alice Leung | Brick & Mortar Ventures





## VC and AEC: How Construction Can Collaborate with Venture Capital and Startups

- Introduction
- Latest Trends in Construction Tech (spend less time here)
- What is Venture Capital?
- Startups and Venture Backed Startups... vs AEC companies
- How Construction Companies Can Engage with Startups
- How Individuals Can Engage with Startups
- Q&A







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Brick & Mortar Ventures Investment Team: A unique combination of venture, startup, and construction expertise



**Darren Bechtel**  
Managing Director



**Curtis Rodgers**  
Partner



**Guillaume Bazouin**  
Partner, EMEA



**Kaustubh Pandya**  
Partner



**Austin Yount**  
Principal



**Alice Leung**  
VP, Platform & Product Strategy



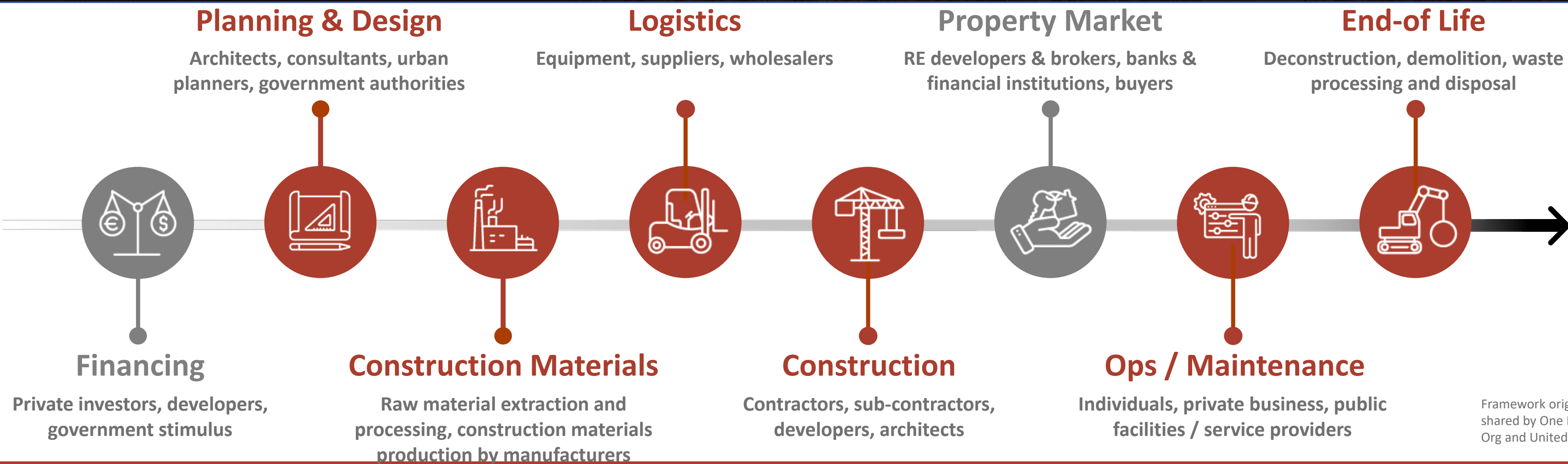




**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# Brick & Mortar Ventures Value Chain Stage Preference and Market Sector Diversification

STAGES OF CONSTRUCTION VALUE CHAIN



Framework originally shared by One Planet Org and United Nations

MARKET SECTORS



Residential



Multi-Family Residential



Commercial



Hospitality



Healthcare



Oil & Gas



Industrial



Infra-structure



Federal & Defense



Utilities



Space





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Brick & Mortar Ventures' Limited Partners

### BUILDING MATERIALS



\$150b+

Home improvement  
retailer



\$22b+

Mechanical and  
plumbing supplies



\$17b+

Cement , ready-mix  
concrete, and aggregates



\$10b+

Insulation products



\$1b+

flooring products and  
systems

### TOOLS & EQUIPMENT



\$15b+

industrial tools and  
hardware



\$14b+

construction  
equipment rentals



\$5b+

Industrial tools and  
fasteners

### VERTICALLY INTEGRATED



\$5b+

building materials  
supplier, distributor,  
contractor in APAC



\$1Bn+ Real estate

development,  
construction, and  
financing in EMEA

### REAL ESTATE



\$19b+

Global CRE services  
company

### CONTRACTORS



\$17b+

Largest privately-owned  
global EPC contractor



\$20b+

Japanese global  
contractor



\$5b+

Mechanical specialty  
subcontractor



\$1b+

Industrial contractor

### SOFTWARE



**AUTODESK**

\$5b+

Design and  
construction software



\$1b+

Construction  
software (China)

### THOUGHT LEADERS



AEC Sector focused  
management consulting  
and investment banking



Google sister company  
focused on cities of the  
future

NOTE: BECHTEL IS A STRATEGIC PARTNER OF BRICK & MORTAR VENTURES AND A MEMBER OF THE FIRM'S PREFERRED INDUSTRY PARTNERS PROGRAM BUT IS NOT A DIRECT INVESTOR IN ANY OF THE FUNDS.





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Brick & Mortar Ventures' Portfolio Companies

### BRICK & MORTAR VENTURES COMPLETE FAMILY OF PAST AND CURRENT PORTFOLIO COMPANIES

With 63 construction tech investments. 12 exits. Brick & Mortar and its Managing Director are the undisputed most active investor in the ConTech ecosystem.



NOTE: THE PORTFOLIO ABOVE IS AS OF 1/31/2024 AND INCLUDES THE DIRECT INVESTMENTS OF THE MANAGING DIRECTOR BETWEEN 2012-2107, PRIOR TO THE FORMATION OF THE FIRM'S INAUGURAL POOLED CAPITAL FUND (BRICK & MORTAR VENTURES I, L.P.) IN JAN 2018.





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# Why do we exist?





# AGC

THE CONSTRUCTION  
ASSOCIATION

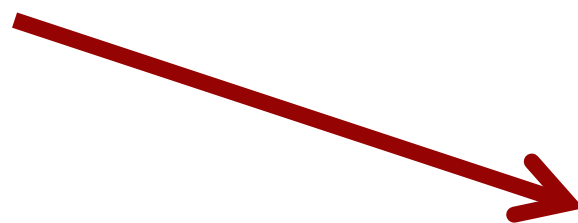
## The MGI Industry Digitization Index

2015 or latest available data

Relatively low digitization  Relatively high digitization

● Digital leaders within relatively undigitized sectors

Sector	Over-all digitization <sup>1</sup>	Assets		Usage			Labor			GDP share %	Employment share %	Productivity growth, 2005–14 <sup>2</sup> %	
		Digital spending	Digital asset stock	Transactions	Interactions	Business processes	Market making	Digital spending on workers	Digital capital deepening				Digitization of work
ICT											5	3	4.6
Media			1								2	1	3.6
Professional services											9	6	0.3
Finance and insurance											8	4	1.6
Wholesale trade											5	4	0.2
Advanced manufacturing					4						3	2	2.6
Oil and gas			2								2	0.1	2.9
Utilities											2	0.4	1.3
Chemicals and pharmaceuticals											2	1	1.8
Basic goods manufacturing											5	5	1.2
Mining											1	0.4	0.5
Real estate	●										5	1	2.3
Transportation and warehousing	●										3	3	1.4
Education	●										2	2	-0.5
Retail trade	●										5	11	-1.1
Entertainment and recreation											1	1	0.9
Personal and local services											6	11	0.5
Government	●										16	15	0.2
Health care			6								10	13	-0.1
Hospitality	●										4	8	-0.9
Construction											3	5	-1.4
Agriculture and hunting											1	1	-0.9

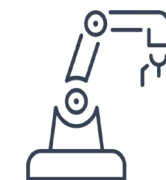




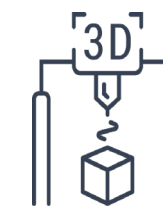
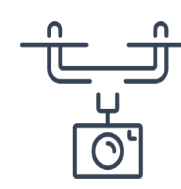


**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Investment Thesis | Past: we lived in a solution scarcity world for a long time in construction due to the unique challenges of a construction environment



Only recently, we have seen the advent of underlying enabling technology for a GPS-denied, metallic, dynamic environment.







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

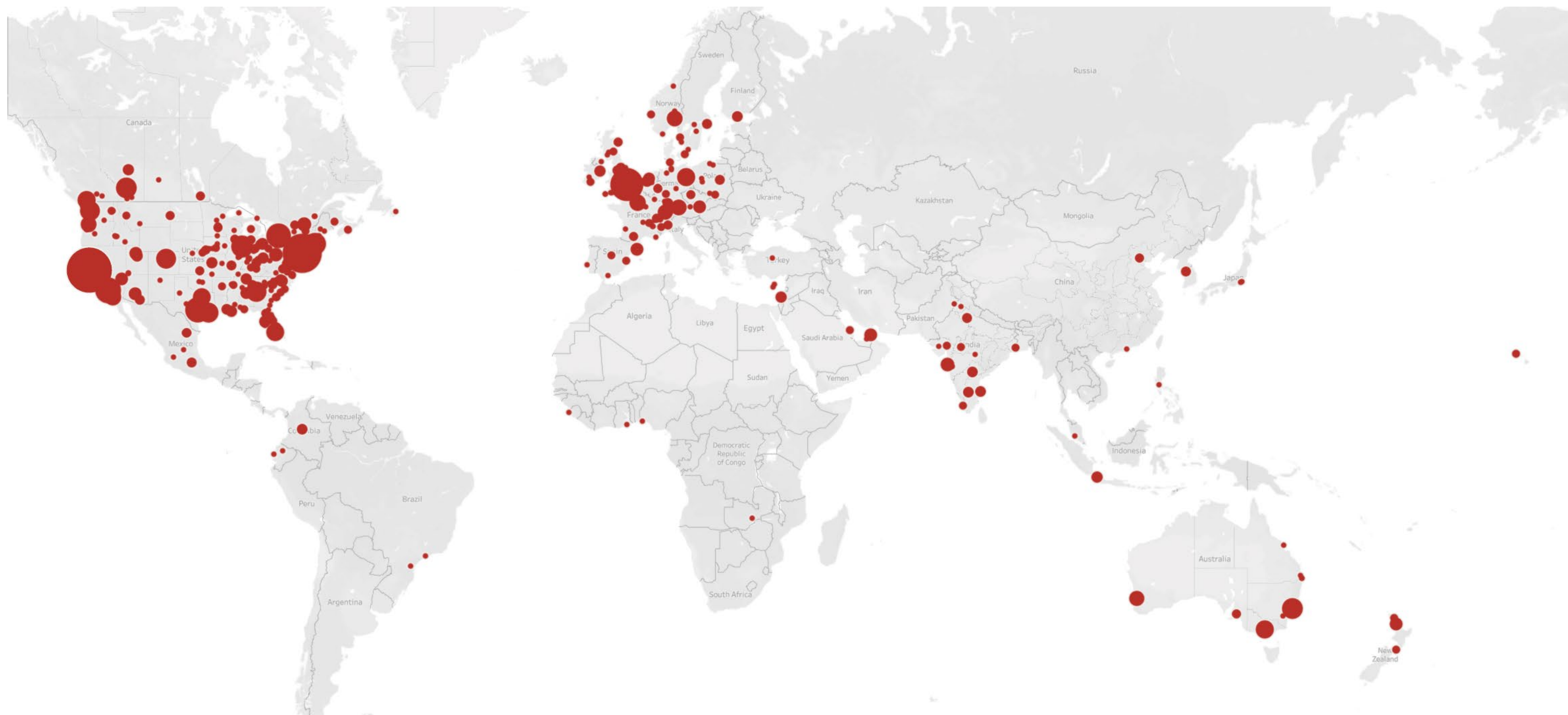
# Venture Capital Funding's Growth





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Brick & Mortar Ventures' Global Deal Flow







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## The growth of construction CVCs



WINNOVATION



**ARCO**  
VENTURES



**SVVL**

Silicon Valley Ventures & Laboratory



**CRH**  
**VENTURES**



**UFP VENTURES**

**gsfutures**





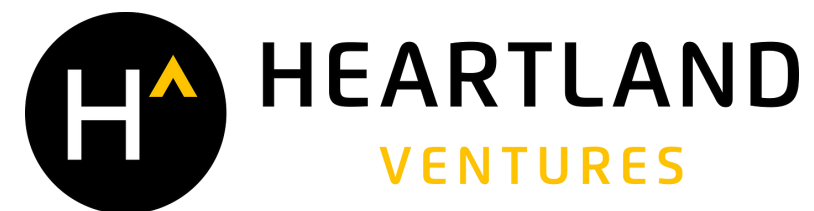


**AGC**  
THE CONSTRUCTION  
ASSOCIATION

The growth of construction focused institutional VCs



**FOUNDAMENTAL**







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Big Rounds in Construction Tech in 2024

**PermitFlow**

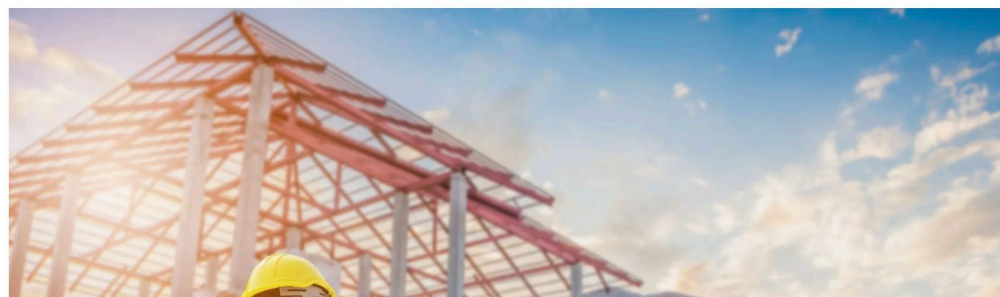
### Featured Article

## This YC alum just raised \$31M to build the 'TurboTax for construction permitting'

Kleiner Perkins led the Series A, which came just over a year after seed round

Mary Ann Azevedo / 7:30 AM PST • February 21, 2024

Comment



# Adaptive

PR Newswire

News

Products

Contact

Search

News in Focus Business & Money Science & Tech Lifestyle & Health Policy & Public Interest People & Culture

## Adaptive Closes \$19M Series A to Transform Construction Finance with AI and Automation

**Adaptive**

NEWS PROVIDED BY

[Adaptive](#) →

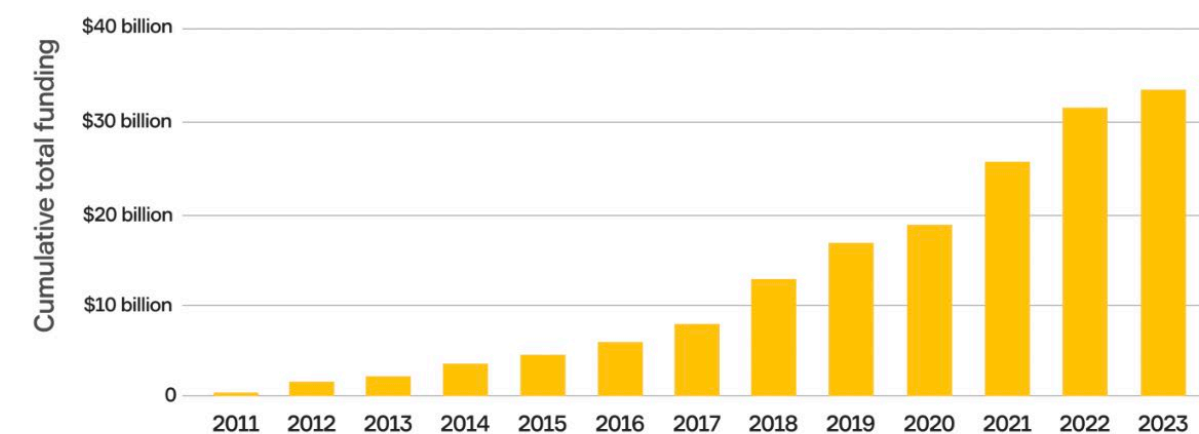
Jul 15, 2024, 10:00 ET

SHARE THIS ARTICLE



*Adaptive positioned to scale its AI-powered financial platform across the \$2 trillion construction market, creating a unified payments infrastructure for the industry*

### F1V Cumulative funding in construction tech startups



Source: Tracxn (2023)

Construction tech startups raised up to \$33 billion in 2023, marking nearly a 30-fold increase over the decade.





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# Big Downfalls in Construction Tech in 2024



Login

Search Q

TechCrunch+

Startups

Venture

Security

## Prefab home builder Veev reportedly shutting down after reaching unicorn status last year

Mary Ann Azevedo @bayareawriter / 10:51 AM PST • November 27, 2023

Comment



THE BUILDING BOARDROOM | REGISTER

Search our site

NEWS ▾ FOCUS ▾ COMMENT ▾ PROGRAMMES ▾ CPD ▾ BUILDING THE FUTURE ▾ JOBS DATA ▾ SUBS

NEWS

## ‘It’s been a torrid time’: Modulous boss Chris Bone on the offsite housing firm’s collapse

By Matilda Battersby | 10 January 2024



d Drury / Getty Images

## Former green-construction unicorn Nexii pursues sale under creditor protection

JEFFREY JONES > ESG AND SUSTAINABLE FINANCE REPORTER

PUBLISHED JANUARY 17, 2024

UPDATED JANUARY 19, 2024

3 COMMENTS

SHARE

BOOKMARK

LISTEN TO THIS ARTICLE

Nexii Building Solutions Inc., a green building startup that boasted a \$2-billion valuation less than two years ago, has been granted protection from creditors as it seeks a buyer to rescue the money-losing operation.





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# What is venture capital?

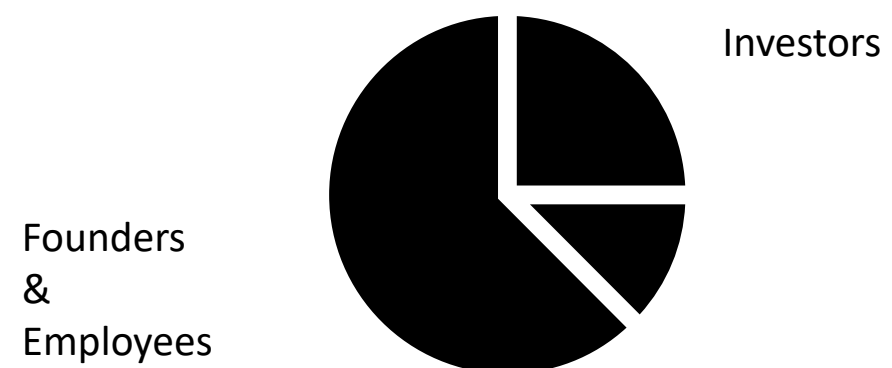




**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## What is Venture Capital / VC backed companies?

### Equity Financing



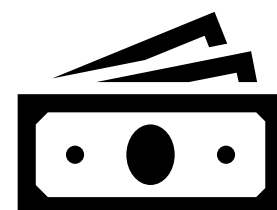
### Business Characteristics:



Not generating near-term cash flow



Risky Business



Exit Strategy

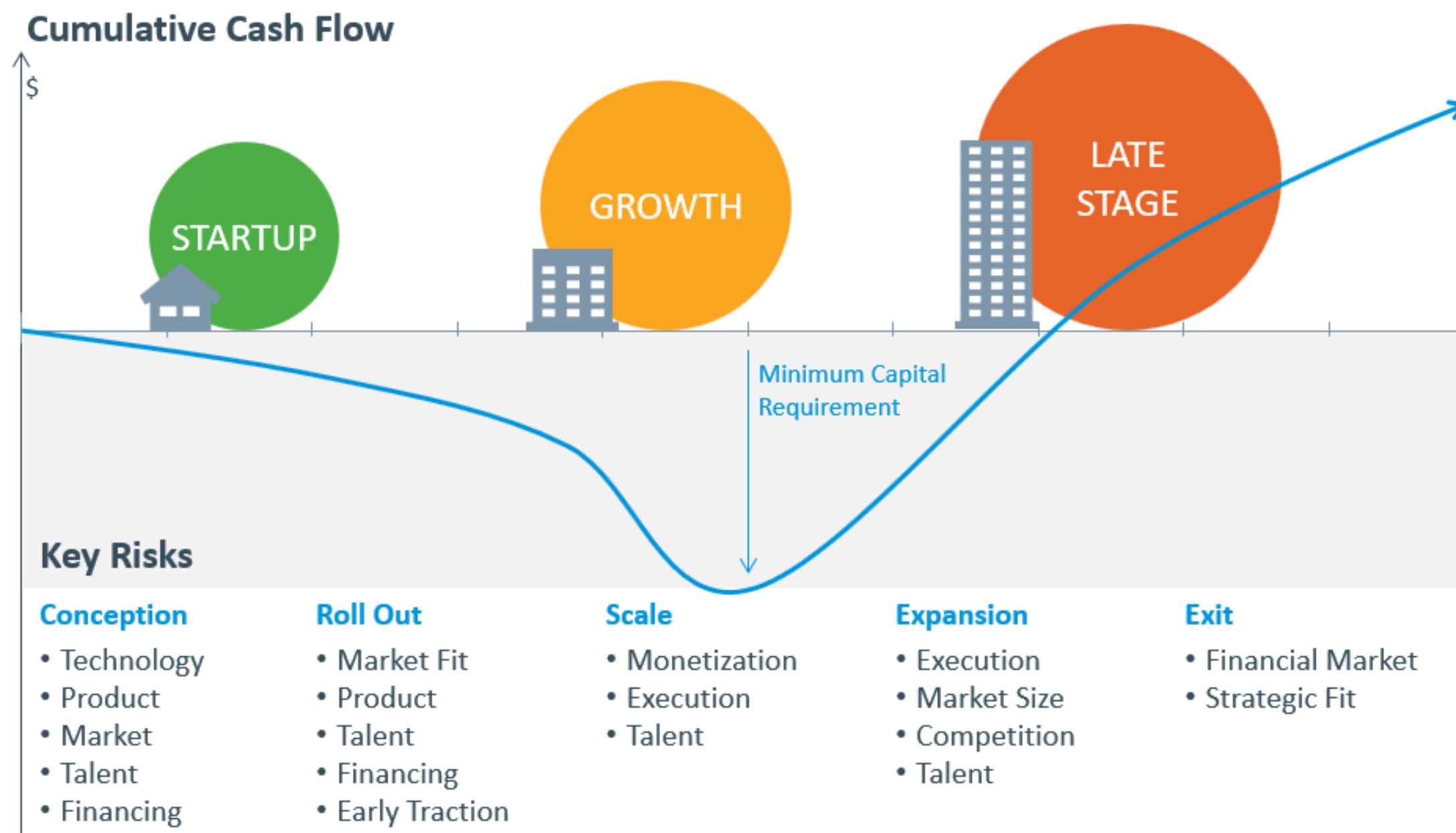
\*These are general business characteristics. The types of companies that VCs invest in change as markets change and vary region by region.





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

Not your typical AEC company

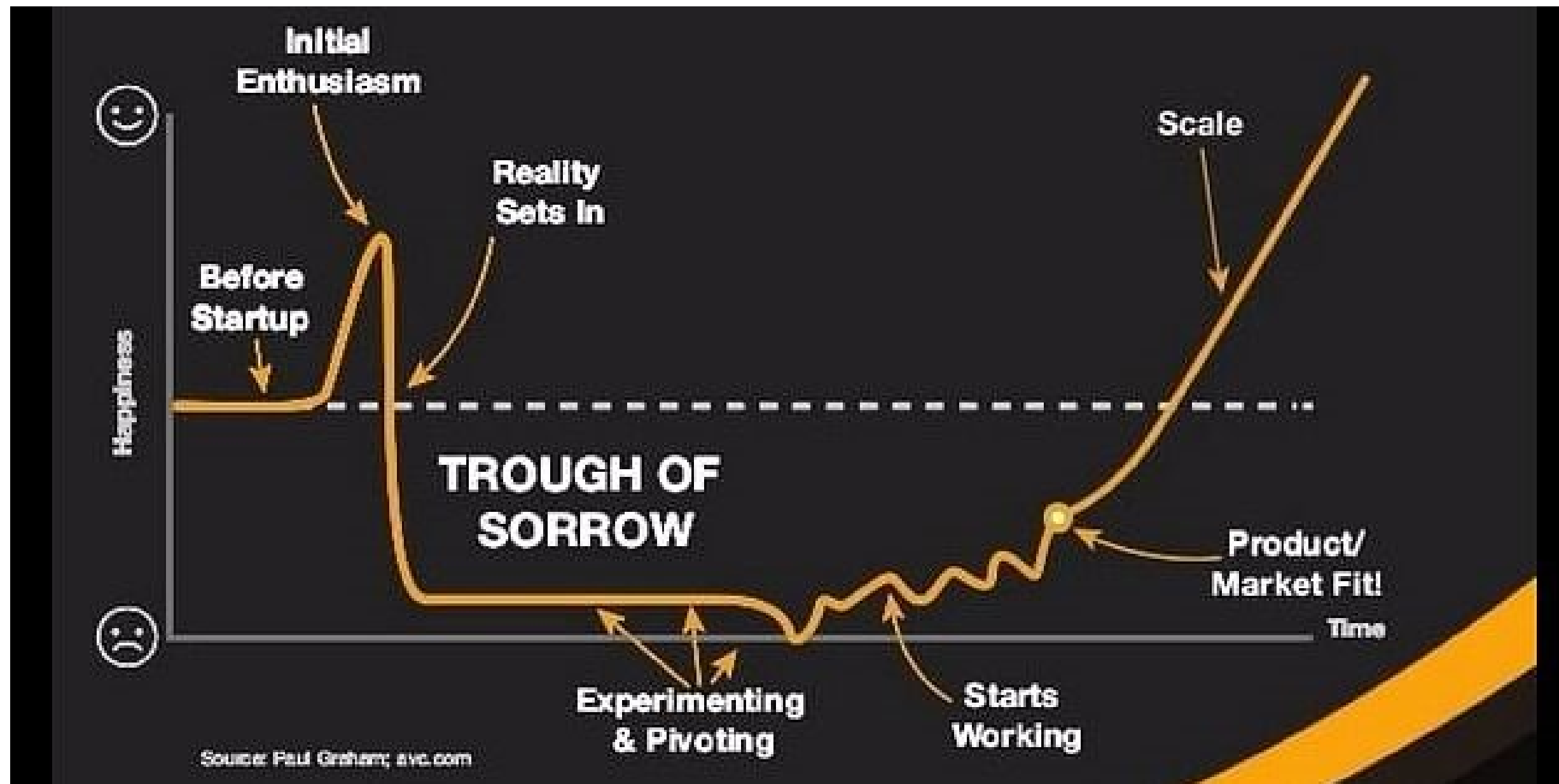






**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Typical startup journey



The Startup Curve graph (Image Source: Paul Graham, avc.com)

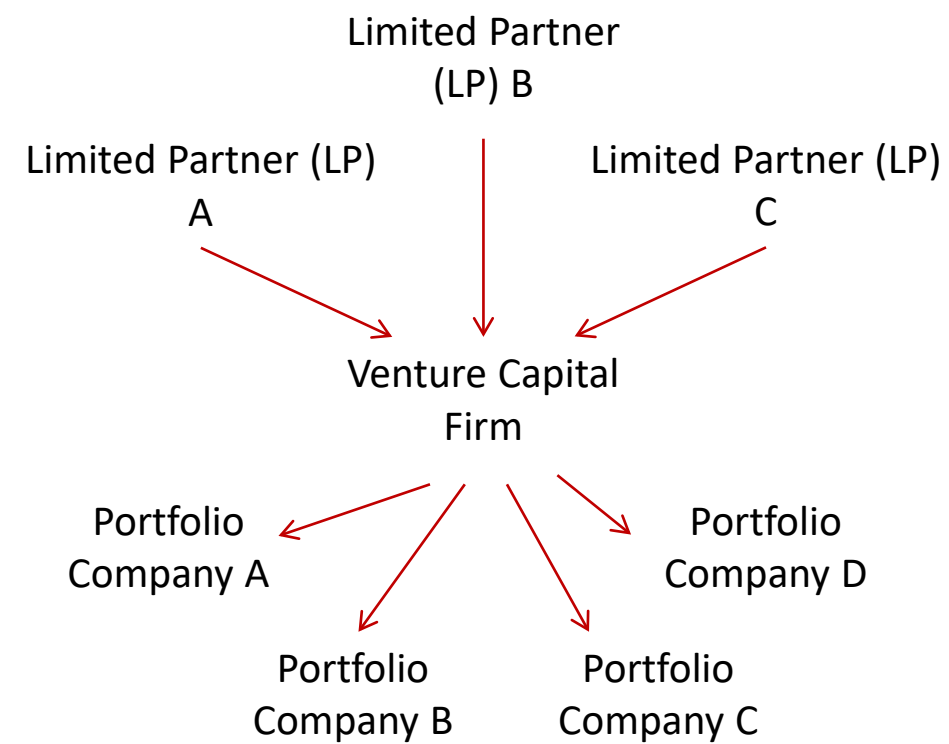




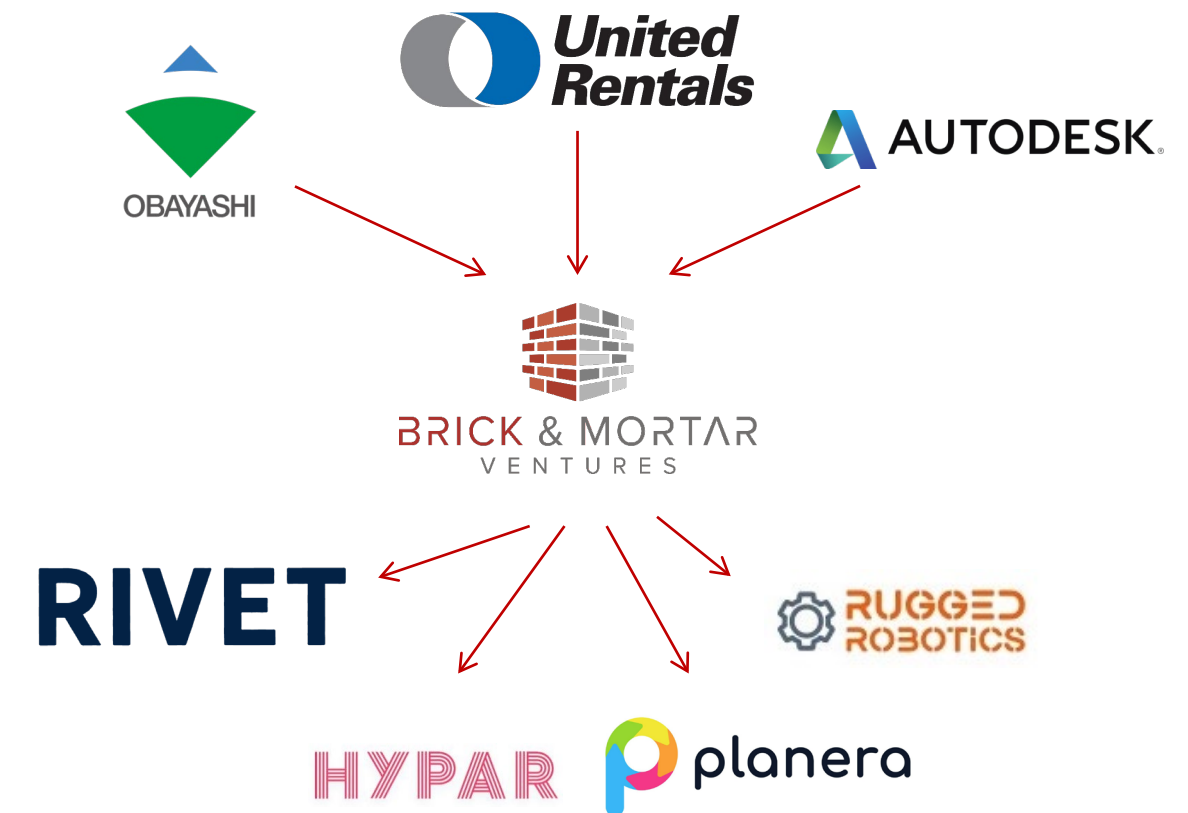
**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## The flow of money

### Generic Example



### Brick & Mortar Ventures as the Example



\*Not all LPs or portfolio companies shown

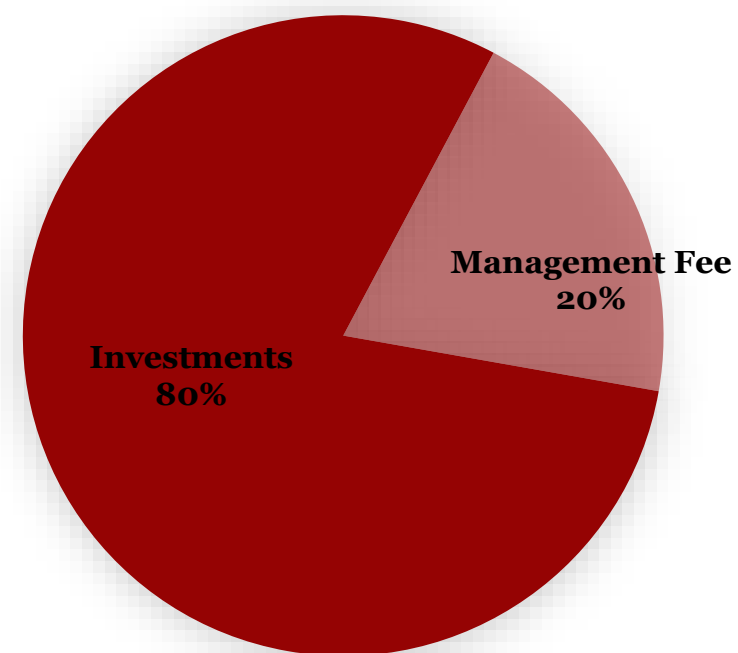


## Typical venture capital firm structure

### How does a VC make money?

- 2% Management Fee (annual)
- 20% Carry Fee (or Carried Interest)
- Fund Life: 10 Years

### \$100M Fund



### Example:

- \$100M Fund
- \$20M Management Fee (approx. over 10 years)
- \$80M for Investing in startups

#### End of Fund Life:

- 20 Portfolio Companies
- Returns: \$350M
- Returns for LPs: \$300M
  - (\$100M original investment + 80% of \$250M)
- Profits for VC: \$50M
  - Carry split amongst team

\*Simplified scenario for example only. Each VC may have a different structure and different agreements with their LPs.





# Institutional Venture Capital vs Corporate Venture Capital (CVC)

## Institutional Venture Capital

Offerings:

- Capital
- Advice
- Hiring

Evaluation Criteria:

- Total Addressable Market (TAM)
- Founders
- Scalability
- Returns

Returns:

- Aiming for at least 10X
- Looking for unicorns

Financially Driven



## Corporate Venture Capital

Offerings:

- Capital
- Advice
- Pilot Projects & Access to Users

Evaluation Criteria:

- Impact on Business (Strategic Value)
- Scalability
- Stability of Startup (if enterprise)
- Customer Support

Returns:

- Efficiencies in business processes
- Varies regarding financial returns

Strategically Driven

\*These are example differences between institutional and corporate venture capital. Evaluate each VC and CVC individually as offerings and criteria differ from firm to firm.



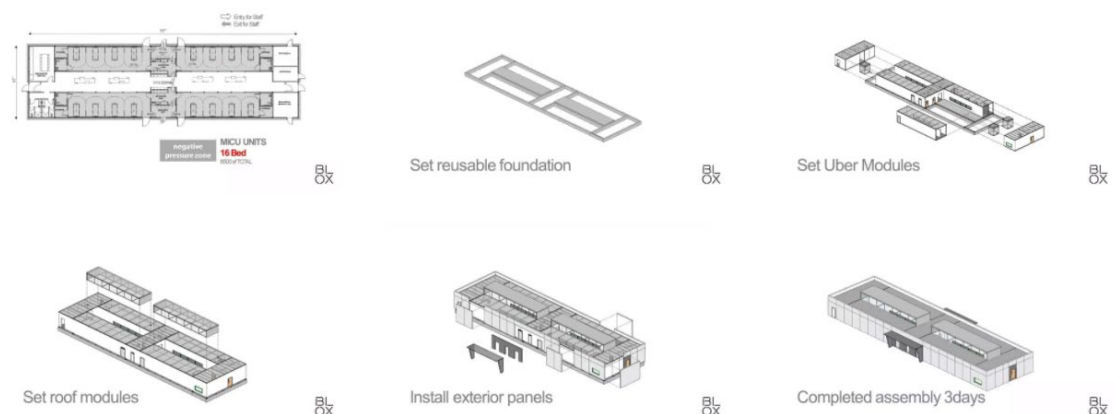


**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Corporate venture capital highlight: Dysruptek from Haskell



**BLOX**



After heavy manufacturing, a BLOX MICU could be set up on-site in a few days. Photos via BLOX







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# Is Venture Capital right for your business?

Comparing VC backed business with AEC businesses



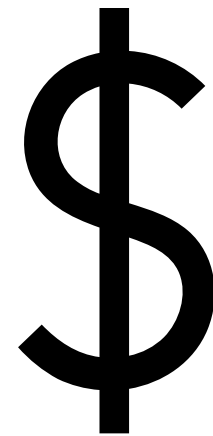


**AGC**  
THE CONSTRUCTION  
ASSOCIATION

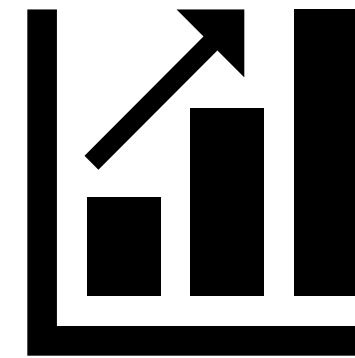
## Options for “Start Up” Capital



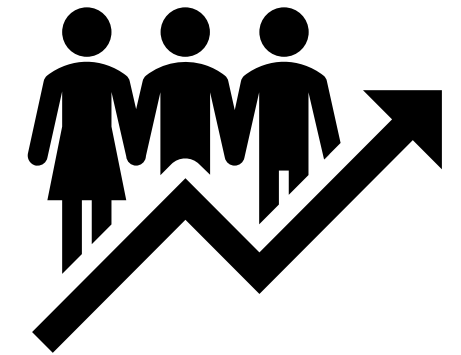
Bank Loan



“Bootstrapped”



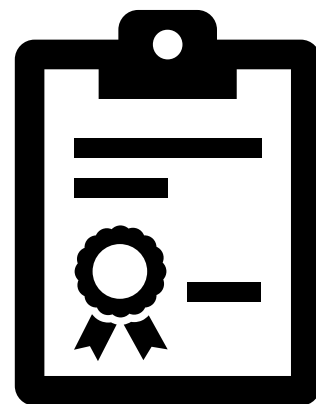
Venture Capital



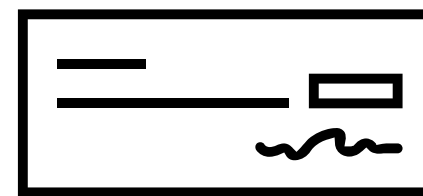
Accelerator Programs



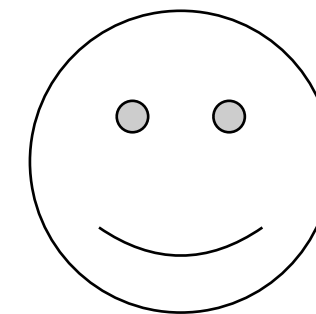
Crowdfunding



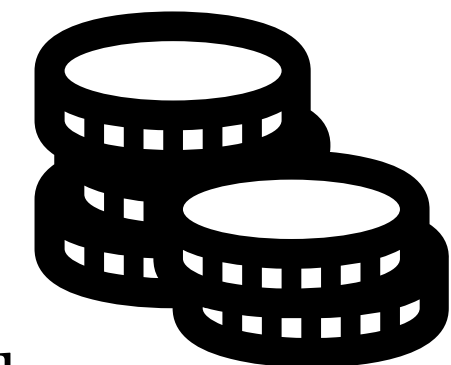
Grants



Contests/  
Competitions



High Net Worth  
Individuals /  
Friends &  
Family



Private Equity





## AEC Company: Design & Engineering -- Stantec

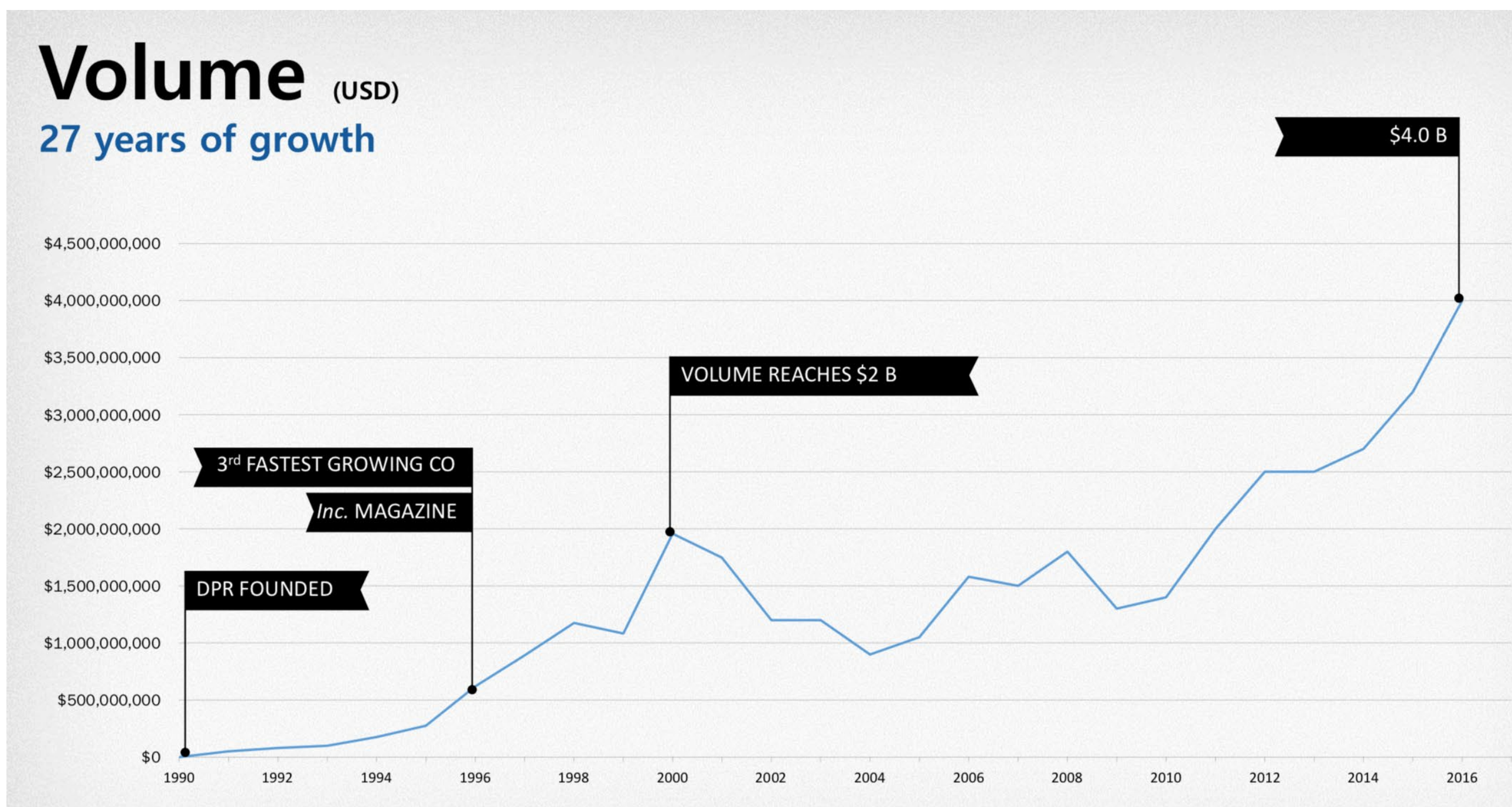
- 1954: Dr. Don Stanley in Edmonton, Canada
- 1967: 50 employees
- 1976: First acquisition
- 1991: First US acquisition
- 1993: 800+ employees
- 2004: employees celebrated the Company' 50th anniversary and employee numbers grew to 4,000
- 2005: Stantec was listed on the New York Stock Exchange
- 2007: 8,700 employees
- 2012: employee numbers topped 12,000
- 2016: Largest acquisition: MWH, 22,000 employees in over 400 locations across 6 continents
- Today: 25,000 employees working in over 400 locations, acquired over 130 firms





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## AEC Company: Construction -- DPR Construction

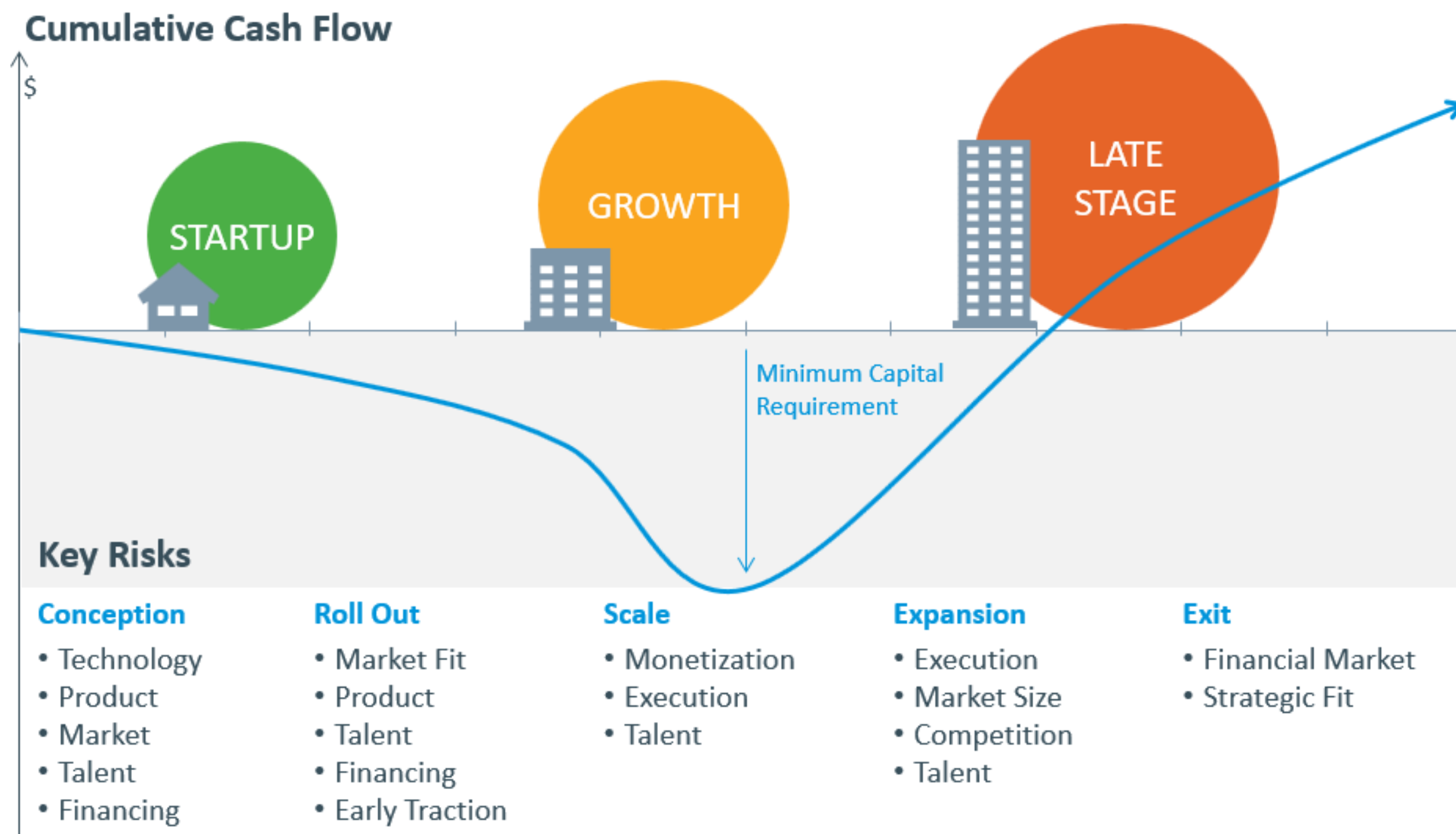






**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Venture Backed Startup – Not your Typical AEC Company





## Early Venture Backed Company: Revit



- The original software was developed by Charles River Software and was founded in 1997
- The company was renamed to Revit Technology Corporation in 2000
- Revit raised a total of \$51 million in four rounds of venture capital financing, most recently closing in November on \$7 million from North Bridge Venture Partners and Atlas Venture
- 2002: Autodesk Inc., a California-based design software company, has announced it plans to buy Waltham-based Revit Technology Corp. for \$133 million cash, pending governmental and shareholder approval.





## The Start of “Construction Tech” -- Venture Backed Company: PlanGrid



- PlanGrid was founded in 2011 and has raised a total of \$69.1 million over [three funding rounds](#), according to its Crunchbase profile. Most recently, in September 2017, it raised \$50 million in a [Series B](#). Among those firms and people that have [invested](#) in PlanGrid are [Y Combinator](#), [500 Startups](#), [Reddit](#) co-founder [Alexis Ohanian](#), [Founders Fund](#), [Sequoia Capital](#), and [Northgate Capital](#).
- Autodesk, Inc. said today it [plans to acquire](#) cloud-based software startup [PlanGrid](#) for \$875 million “net of cash.” The transaction is expected to close sometime in AutoDesk’s fiscal fourth quarter, which ends Jan. 31, 2019.





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

Non-venture backed software you might know







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Venture Backed Startups: Few Things to Remember

- \$0 to \$100M in Revenue in 6-8 years
- Growth and scale ([almost] at all costs)
- Continuously raising capital and selling
- Investors' oversight
- Selling equity
- High Margins (~80-90%)
- Step Change for our industry

**DOMATIC**

**CURRI**

**RUGGED  
ROBOTICS**

**RIVET**

**planera**

**HYPAR**





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# How Companies Can Engage with Startups





## Benefits of Engagement

### For Corporate

- Marketing
- Efficiency gains, cost savings
- Innovation
- Competition
- Moving the industry forward

### For Startup

- Industry feedback
- Growth
- Early pilots, early customers
- Building out product roadmap

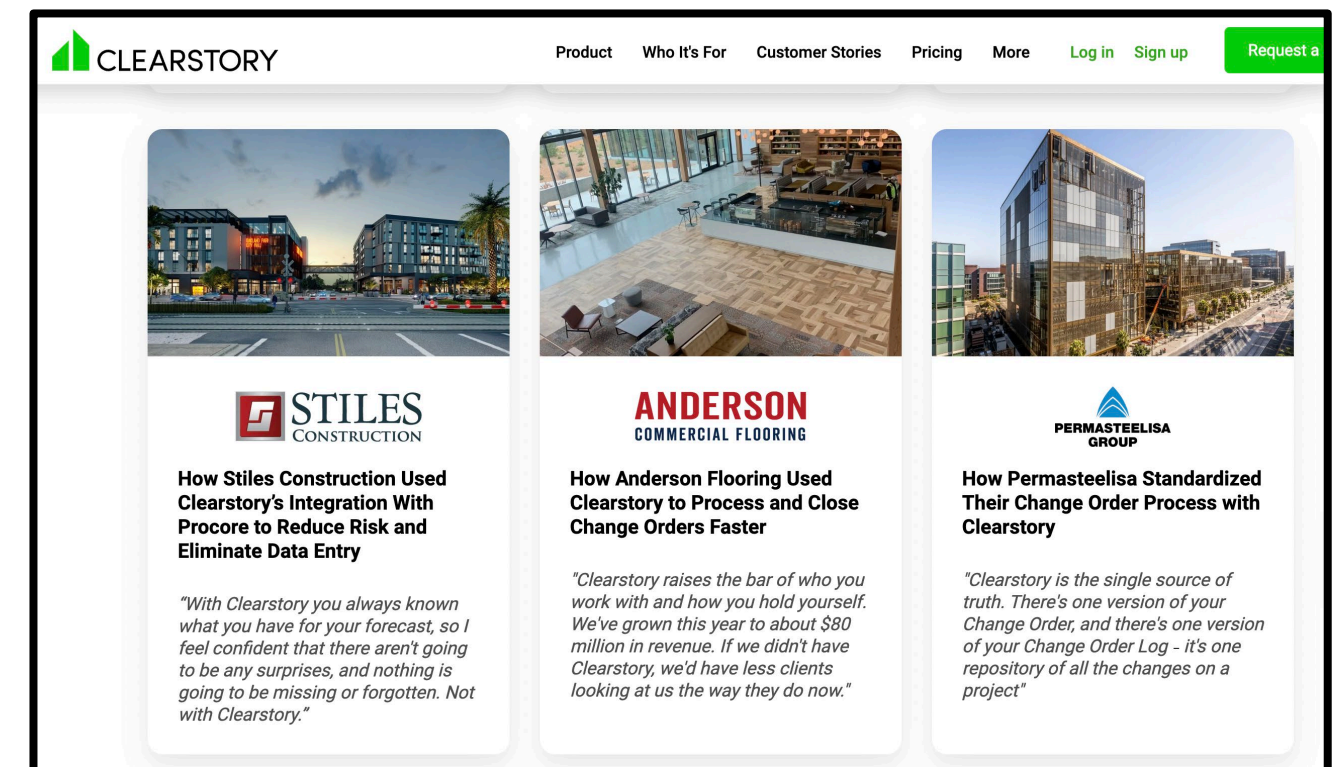
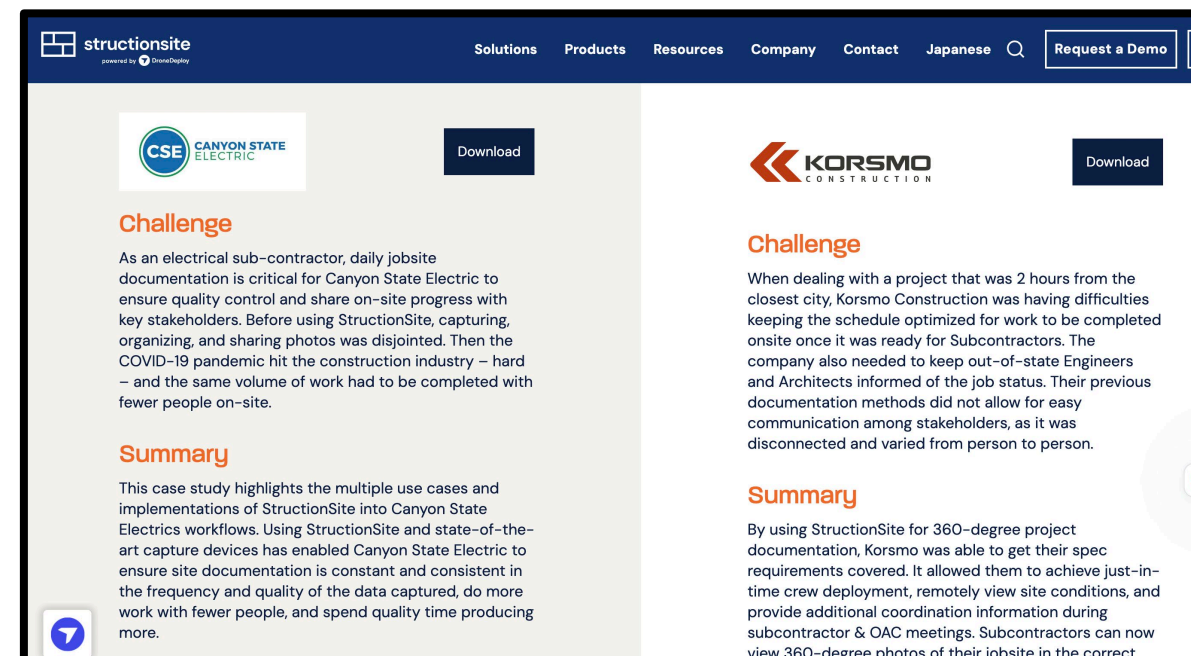




**AGC**  
THE CONSTRUCTION  
ASSOCIATION

## Ways to Engage

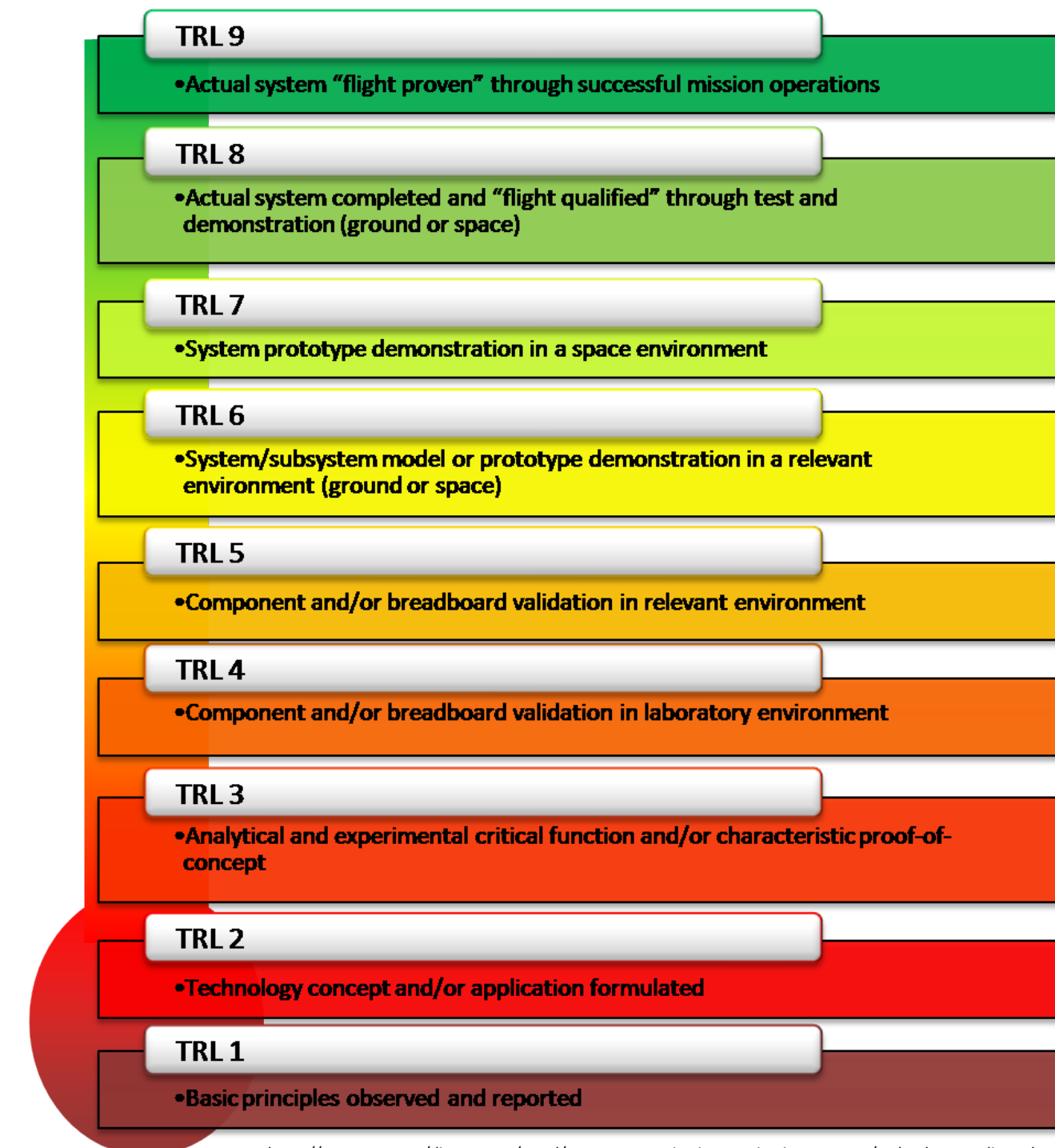
- Pilots
- Corporate Venture Capital Investment
- Lighthouse Customer / Design Partner
- Being a Customer
- Providing Feedback
- Case Studies





## When / Where / How to Engage: Things to Consider

- Tech readiness alignment between construction company and startup
- Alignment on partnership/relationship
- Startups tend to be inexpensive to pilot at the early stages
- Risk of uncertainty – 9 out of 10 startups fail
  - Look at stage and funding
- Challenges with scale – lack of customer support at early stages
- May not comply with IT requirements
  - SOC 2? Fedramp



<https://www.nasa.gov/directorates/somd/space-communications-navigation-program/technology-readiness-levels/>





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

# How Individuals Can Engage with Startups





## Benefits of Engagement

### For Individual

- Recognition (by company and startup)
- Influence on startup → industry
- Advisory opportunities and shares
- Track record for career transition

### For Startup

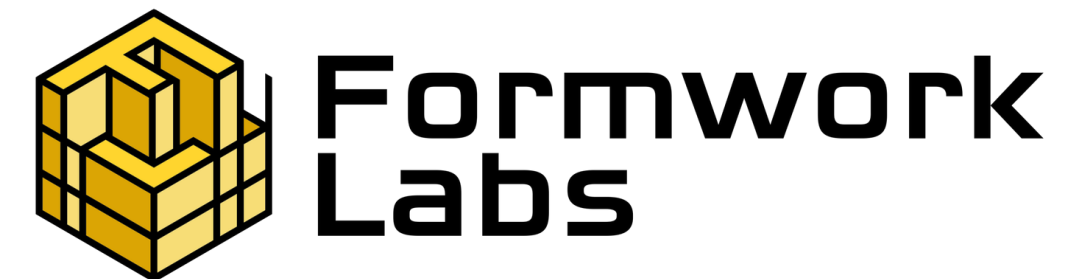
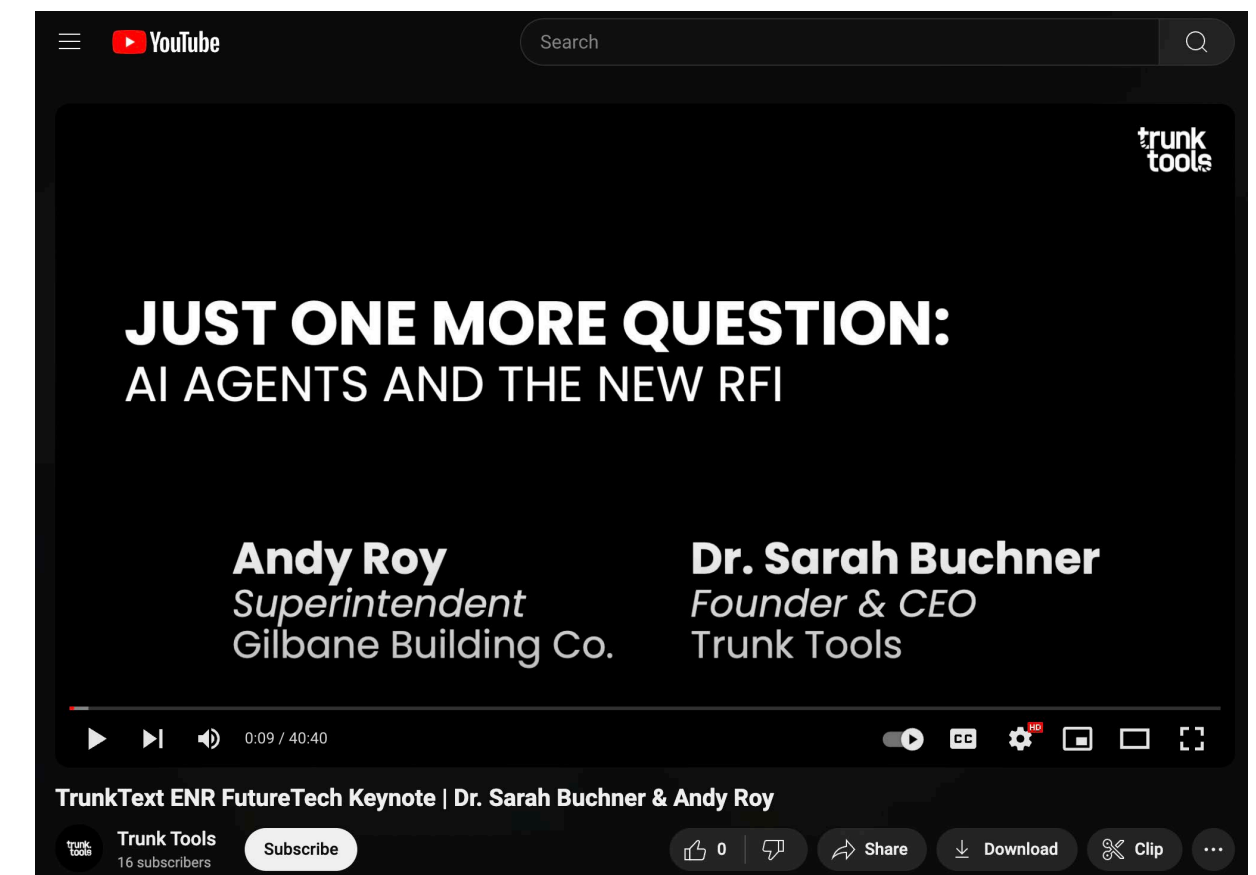
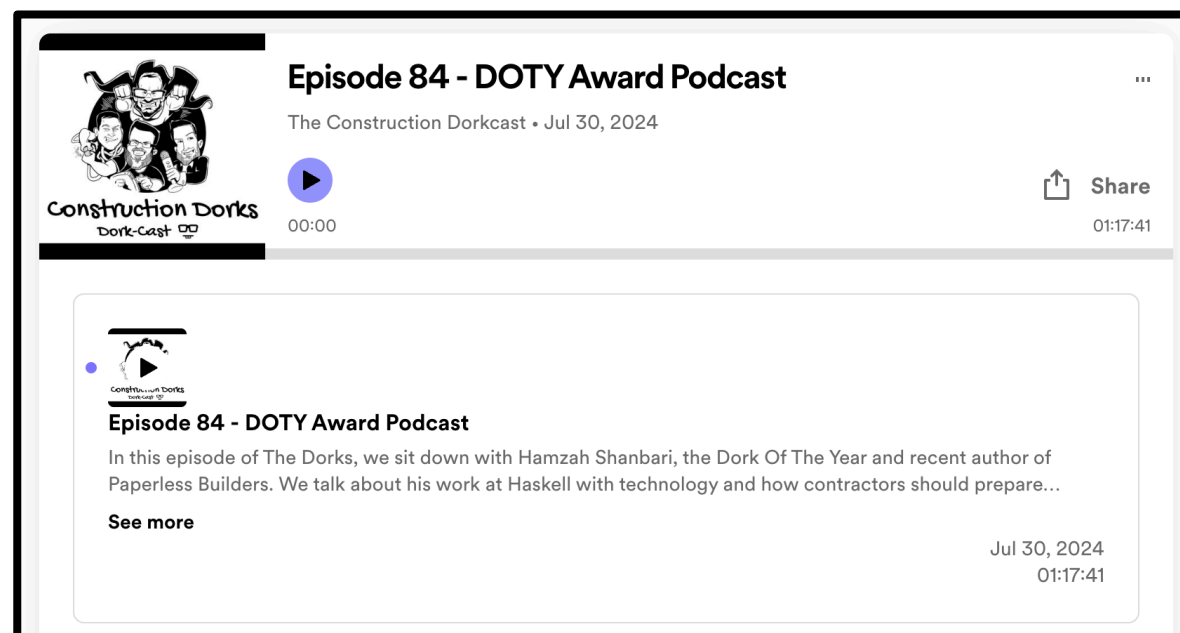
- Personal relationships
- Hiring opportunities
- Feedback
- ‘internal champions’





## Ways to Engage

- Advising (individual and customer advisory)
- Feedback
- Pilots / Case Studies
- Accelerator programs







**AGC**  
THE CONSTRUCTION  
ASSOCIATION

So... what about making the leap?





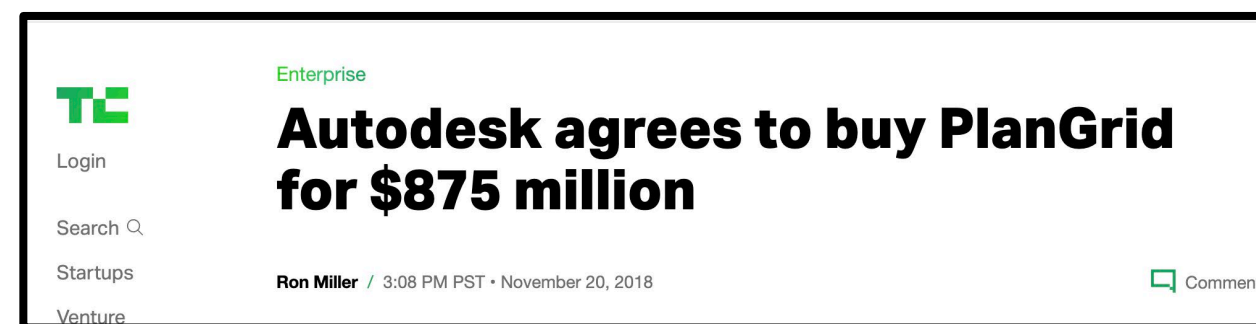
**AGC**  
THE CONSTRUCTION  
ASSOCIATION

Question for Audience:  
How many of you have had staff or friends in  
the industry join an AEC tech company?



## Things to consider before making the transition:

- Things to think about
  - What is the startup's risk profile?
    - Stage, funding received, runway
  - Equity vs salary
  - Work – life balance
  - Funding, risk/equity/salary
- Transitioning from construction to construction tech
  - Fast paced work environment
  - Scale and growth is #1
  - Conflicting ethics / motives
- Opportunities
  - Startups
  - Bootstrapped companies
  - Big companies













**AGC**  
THE CONSTRUCTION  
ASSOCIATION

Example of folks who have made the transition and are resources:



**Shirin (Aalami) Arnold** ✓ (She/Her) · 1st  
Passionate about the construction industry and supporting AECO companies on their journey  
Denver Metropolitan Area · [Contact info](#)

 Dropbox  
 Stanford University



 





**Kevin Soohoo** ✓ · 1st  
Making Data Governance & Security Easy for AEC Firms | Construction Technology | Innovation | Start Up GTM | Advisory Board | Adjunct Professor | Philanthropy  
San Francisco Bay Area · [Contact info](#)



 Egnyte  
 San Jose State University



 





**Kristopher Lengieza** ✓ (He/Him) · 1st  
Vice President @ Procore Technologies | Construction Technology Evangelist, Partnerships Leader, Digital Transformation Facilitator  
Jupiter, Florida, United States · [Contact info](#)



 Procore Technologies  
 Lehigh University



 





**Amanda Comunale** ✓ (She/Her) · 1st  
AEC Operations & Technology Expert  
Akron, Ohio, United States · [Contact info](#)



 ASC Engineered Solutions  
 Case Western Reserve University



**Zach Scheel, P.E.** ✓ · 1st  
CEO at Rhumbix | Go paperless in the field today to improve margins | Forbes #8 Veteran Startup in US  
San Francisco Bay Area · [Contact info](#)

 Rhumbix  
 Stanford University Graduate School of...





**AGC**  
THE CONSTRUCTION  
ASSOCIATION

Thank You!  
Q&A