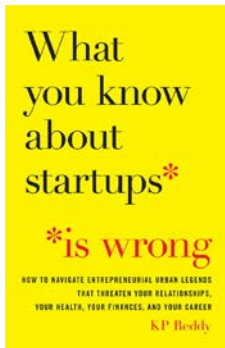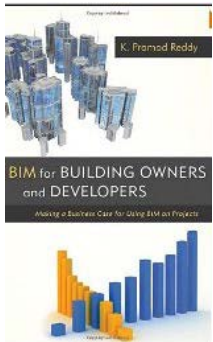# Creating an Innovation District

**K.P. Reddy**

Shadow Ventures

# Our Founder: K.P. REDDY

KP is a globally recognized authority in the Built Environment, artificial intelligence, robotics and automation, collaborative communication, mobile applications and cloud computing. Over 25+ years, he has been a technologist, subject- matter expert, founder, CEO, advisor, investor, professor, author and coach.

KP is the CEO of two of companies in the BuiltTech industry (Konstru & PZFlex) and sits on the Board of WAimat and Hummingbird Kinetics. KP has sold three BuiltTech companies. RCMS (sold to ARC), Cereus Tech Partners (sold to Verso at 35x Multiple), and Ampirix (sold to The Combine). KP formerly ran Enterprise Transformation and Gehry Technologies (Frank Gehry) and was the General Manager of ATDC, one of the oldest incubators at Georgia Tech. While KP started writing code at age 13, he is a Civil Engineer from The Georgia Institute of Technology.
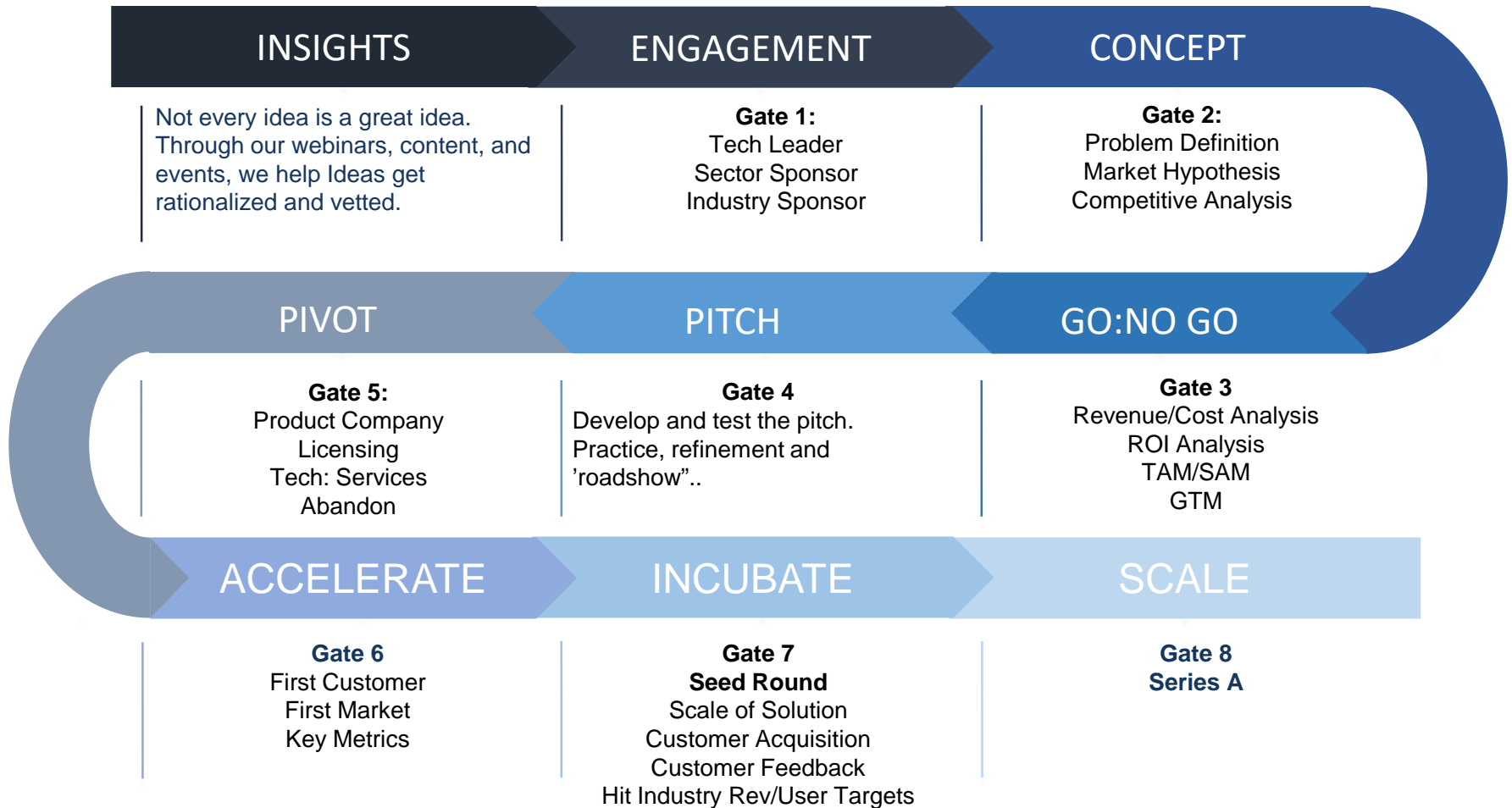
# The Innovation Journey

| INSIGHTS | ENGAGEMENT | CONCEPT |
|---|---|---|
| Not every idea is a great idea. Through our webinars, content, and events, we help Ideas get rationalized and vetted. | **Gate 1:** Tech Leader Sector Sponsor Industry Sponsor | **Gate 2:** Problem Definition Market Hypothesis Competitive Analysis |

| PIVOT | PITCH | GO:NO GO |
|---|---|---|
| **Gate 5:** Product Company Licensing Tech: Services Abandon | **Gate 4** Develop and test the pitch. Practice, refinement and 'roadshow".. | **Gate 3** Revenue/Cost Analysis ROI Analysis TAM/SAM GTM |

| ACCELERATE | INCUBATE | SCALE |
|---|---|---|
| **Gate 6** First Customer First Market Key Metrics | **Gate 7 Seed Round** Scale of Solution Customer Acquisition Customer Feedback Hit Industry Rev/User Targets | **Gate 8 Series A** |

**BuiltTech Labs**

# Building a Startup Ecosystem

Key aspects: Narrow variables and focus.

- Sector Clusters

- Talent

- Ideas

- Capital

- Connections

# Sector Clusters

- Do not invent Sectors.

- Use existing; BuiltTech, FinTech, RetailTech, ConsumerTech, etc..

- Pick 3; 1st (Top 10), 2nd (Top 20) and 3rd (Aspirational)

- Align to Corporate Partners

- Be known for something

# Talent

- Attract Leadership that aligns with your Sectors.
- Work with Educational Institutions to align with Sectors and leadership.
- Institutionalize the Sector Vocabulary
- Create network outside of your geography for mentors, advisors, etc that are leaders in the Sector.

# Ideas

- Hackathons

- Accelerators

- Incubators

- Events

# Capital

- Identify High Net Worth Community

- Educate them on Angel Investing

- Market to VCs that are focused on your target Sectors

- Host Demo Days and Annual Events

# Connections

- Corporate Match Making

- Innovation Districts

- Alumni Networks

- 1:1 Mentoring/Coaching

# Media and Buzz

- Create original content
- Highlight success stories
- Identify "natives" that are doing well outside of your market. Promote their success
- Curate the stories.

# My process in Atlanta

- Credible Serial Entreprenuer
- ATDC (State of GA + Georgia Tech)
- Narrowed to a few Sectors
- Created EIR Program Focused on Sectors
- Attracted Corporates Interested in Sponsoring (WorldPay, etc)
- Architected Engage Fund
- Left ATDC

# Next Challenge

- Build a global ecosystem.
- Focus on a single **Sector** (Fixed Variable+Focus)
- Identified Global **Talent** with narrow expertise
- Weekend Accelerator **Ideas** to MVP
- Started Shadow Ventures for Seed **Capital**
- Leveraging technologies like SLACK and VC to keep community **Connected.**

# BuiltTech Labs

BuiltTech Labs is a closed ecosystem of innovators, entrepreneurs and investors seeking to disrupt the Built Environment through innovation.

Welcome to **BuiltTech Labs**

*We are integrating an ecosystem of **Talent, Ideas, Capital** and **Connections** focused on disrupting the Built Environment.*

Problems in the Built Environment

Industry

71,000+ Interior Designers

120,000+ Architects

40,000+ Program Managers

140,000+ Owners

45,000+ Engineers

550,000+ Contractors

++Building Product Manufacturers

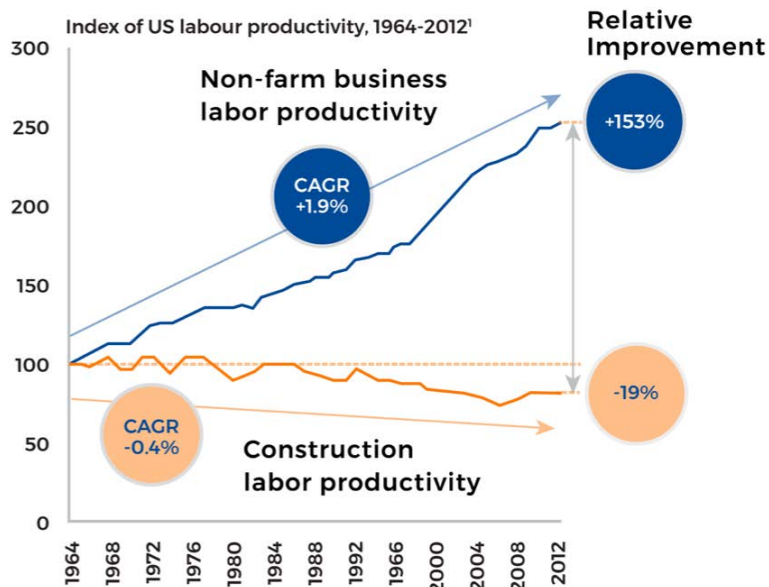Innovation (Industry and Pure Startups)

# BuiltTech: The Sleeping Giant

"**Built Environment Technology,** also known as BuiltTech, is the innovation through technology that provides the framework for the physical world around us."

BuiltTech is what shapes the future of planning, design, construction, management of buildings, infrastructure, and cities.

"Real estate is a massive asset class representing trillions of dollars in value. To date, the industry has not been thoroughly affected by technology and software"  - CBInsights

Index of US labour productivity, 1964-2012[1]

Non-farm business labor productivity
CAGR +1.9%

Construction labor productivity
CAGR -0.4%

Relative Improvement
+153%
-19%

"McKinsey estimates that the world will need to spend $57 trillion on infrastructure by 2030 to keep up with global GDP growth.[1] This is a massive incentive for players in the construction industry to identify solutions to transform productivity and project delivery through new technologies and improved practices."                     - McKinsey

"**Silicon Valley is running out of verticals to attack, and real estate is a big one,**"
- Bill Field, LeFrak

# The Opportunity

The Ecosystem that supports the Built Environment has been slow to adopt technology due to the high degree of fragmentation.

Generally takes 50+ entities to execute on a single building.

Ability to attract StartUps with more favorable valuations.

This fragmentation creates a void of innovation and technology leadership.

1 Planet: 1 Chance – Our investments by their nature drive efficiency in the Built Environment.

| | |
|---|---|
| **71,000+ Interior Designers** | **120,000+ Architects** |
| **40,000+ Program Managers** | **140,000+ Owners** |
| **45,000+ Engineers** | **550,000+ Contractors** |

# The AEC digital transformation

## Crisis to Innovate

There is a crisis to innovate* in the building industry as it becomes more crowded, less profitable, has shortages of labor, and races to keep up with population growth.

## Ubiquity of Tech

Unlike a decade ago, owners, investors, lenders, appraisers, builders, designers, and subcontractors carry smart devices in and around buildings/sites constantly. So the basic technological platforms are already on-site and readily used by all parties for the first time.

## Price of Tech

With the proliferation of Open APIs, Cloud Computing (AWS), Rapid Prototyping, and Startup tools, young companies are able to start and grow less expensively.

"Construction will soon be characterized by connected systems of sensors, intelligent machines, mobile devices, and new software applications—all integrated on a central platform of building information modeling (BIM)."

- The Transformative Power of Building Information Modeling, BCG

# Industry and Technology

Industry

Architecture

Engineering

Construction

Finance

Building Products

Infrastructure

Security

Utilities

Logistics

Real Estate (Retail, Office, Industrial, Multifamily)

Facilities Management

Technologies

BIM: Tracking, quantifying, interpreting, and applying the massive data flows in and around buildings.

Cloud/Mobility: Utilizing cloud computing to store and manage all of the data mentioned above.

Robotics: Disruption and automation of supply chain and warehouse management through robotics.

Industrial IOT: Sensors and tech-enabled devices to track everything that happens in a built environment.

Machine Learning/AI: Data science for the massive amounts of data provided with the built environment to better predict behaviors and outcomes.

Blockchain: Financial security and track ability of cryptocurrency to finance buildings or projects.

# Why BuiltTech Labs?

- The Built Environment is large and fragmented.
- The startup community is nascent and inexperienced.
- Buying decisions are shaped through relationships.
- Industry Data is lacking and startups consume capital seeking product:market fit.
- Startup acceleration is a challenge and not capital efficient.
- Access to world-class technology advisors is a challenge.
- The industry is being challenged to attract and retain next generation talent.

# BuiltTech Labs is..

1. BuiltTech Insights (Research)
2. BuiltTech.co  (Thought Leadership)
3. BuiltTechX (Accelerator)
4. BuiltTechNext (Incubator)
5. Venture Capital (w/ Shadow Ventures)
6. Space (In Process)

# BuiltTech Insights

BuiltTech Insights is a **thought leader in the built environment** filling a void for everyone in the ecosystem from start-ups to established business.

BuiltTech Insights offers proprietary data for customer discovery and access to thought leadership across all of BuiltTech Labs.

We publish original content, including:
- Annual outlooks on the built environment
- Sector/technology focused research
- Customized research by out analyst team
- Unique perspectives on start-ups and new technology entering the market

Members of our closed ecosystem also benefit by networking on our peer-to-peer platform to share knowledge and experiences.

**BuiltTech Insights collects and provides cross-sectional data** across numerous different categories to meet your specific data needs in the Built Environment.

## Technologies

- ✓ BIM
- ✓ Cloud/Mobility
- ✓ Robotics
- ✓ Industrial IoT
- ✓ Machine Learning/AI
- ✓ Blockchain

## BuiltTech Sector

- ✓ Architecture
- ✓ Engineering
- ✓ Infrastructure
- ✓ General Contractors
- ✓ Finance
- ✓ Building Products
- ✓ Infrastructure
- ✓ Security
- ✓ Utilities
- ✓ Consulting
- ✓ Logistics
- ✓ Real Estate
- ✓ Facilities Management
- ✓ Development
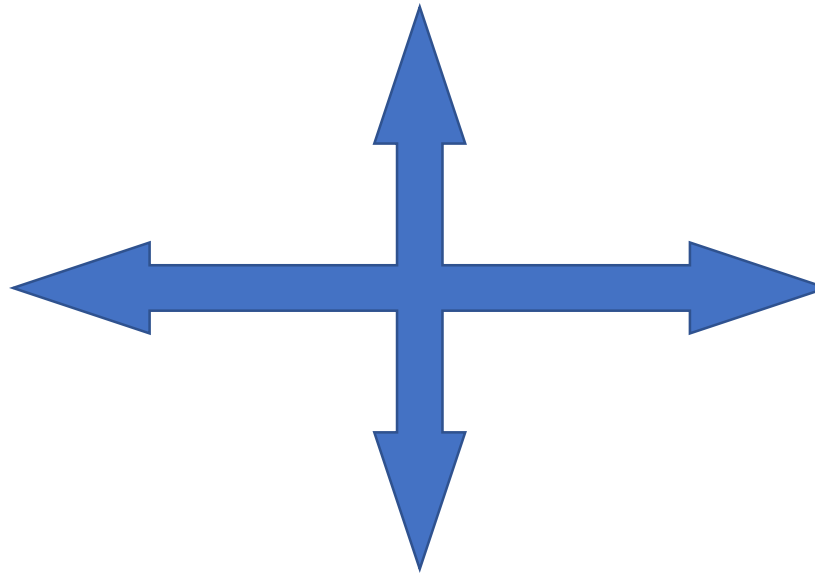- ✓ Investors
- ✓ Trade / Sub-contractors

## Delivery Phase

- ✓ Planning/Programming
- ✓ Schematics
- ✓ Design Development
- ✓ Construction Documents
- ✓ Bidding
- ✓ Estimating
- ✓ Pre-Construciton
- ✓ Coordination
- ✓ Construction
- ✓ Commissioning
- ✓ As-Builts/Record Drawings
- ✓ Occupancy
- ✓ Facilities Management

## Markets

- ✓ Hotel
- ✓ Office
- ✓ Restaurant
- ✓ Medical
- ✓ Educational
- ✓ Retail
- ✓ Religious
- ✓ Industrial
- ✓ Warehouse
- ✓ Multi-Residential
- ✓ Mission Critical
- ✓ Entertainment

# Use BuiltTech Insights to grow you business

We help business leaders across all major functions focused on the built environment with objective insights they need to make the right decisions. Our suite of services delivers **strategic advice and proven best practices to help clients succeed** in their mission-critical priorities.

We are in steady contact with our clients worldwide. We publish original research quarterly, and our analysts are in constant contact with our clients. Our focus allows us to provide deeper category coverage and deliver insight to our clients specific to the built environment.

**Research documents and perspectives** - We offer several products and services through which our clients can take advantage of the insight gained through our rigorous research processes and proprietary methodologies.

**Ask an analyst** -  As a client, you can schedule an appointment to speak to an analyst. You can ask questions or obtain research about your most pressing issues or areas of interest. Let us help you through every stage of planning, implementing and managing your technology initiatives in the built environment.

**Vendor briefings** - A vendor briefing is a research tool for industry analysts, and an opportunity for built environment vendors to present their products, services and business strategies. During a briefing, the flow of information predominates from vendor to analysts and is not interactive.

**Peer networking** - Access to the shared knowledge and experiences of our clients and Built Tech professionals around the world.

**BuiltTech.CO**

- Events (BuiltTech Week and Workshops)

- Research and Data

- Email Newsletters

- Podcasts:Webinars

- Market Influence

# BuiltTech

## #BuiltTechWEEK

**October 2-6, 2017**

Disrupting the built environment with technology...

### Atlanta, GA

"**Built Environment Technology**, also known as BuiltTech, is the innovation through technology that provides the framework for the physical world around us."

**BuiltTech is what shapes the future of planning, design, construction, management of buildings, infrastructure, and cities.**

*BuiltTech.co for more information*

# Press and Influence : Shaping an Industry



**$25 million venture capital fund targets Atlanta's #1 industry — real estate**

SUBSCRIBER CONTENT:    Sep 19, 2017, 6:30am EDT

A new venture capital group is raising a $25 million fund targeted at Atlanta's biggest industry — real estate.

Atlanta-based Shadow Ventures will invest in startups targeting the Building Environment (BuiltTech) industry, which straddles multiple sectors, including technology, real estate and sustainability.

MICHAEL BECKERMAN

ATLANTA-TECH-EDGE

BUILTTECH WEEK

11 ALIVE

🏢 **BuiltTech**

**#BuiltTechWEEK**

October 2-6, 2017

Disrupting the built environment with technology…

**Atlanta, GA**

**hypepotamus**

| NEWS | COMPANIES | PEOPLE | JOBS | EVENTS | COMMUNITY | NEWSLETTER |

**Atlanta Is Shaping the Future Of Where We Live At BuiltTech Week**

SEPTEMBER 4, 2017 BY ANGELA KING

# BuiltTechX

- 9 Week Cohort
- Week 1: Thu – Sat; Kickoff Program 3 Day Workshop
- Week 2-4: Fri – Sun;* Work session
- Week 5: Fri – Sat; Pitch Days & Guest Lecture Series
- Week 6-8: Fri – Sun;* Work session
- Week 9: Fri – Sun;* Work session : Event
- Demo Day

Cost: $30K per team; 10 Teams
Startups: Corporate Innovation Teams

*Sunday is half-day to accommodate travel

# BuiltTech Labs Ecosystem



Architects/Engineers

Contractors

BPM's

Project Owners

# BuiltTech Labs

As Executive Director, Jackie Morck has been on the cutting edge of technology and building innovation for more than a decade. A former architect, she brings an invaluable perspective on the pain-points and unique technological solutions of commercial building design and construction. She is the founder of Keyin and the CEO of SD6.

Kristi Crosswhite, Program Manager
With over 17 years of experience in Real Estate, Sales, Marketing and Project Management, Kristi works with our partner companies and ecosystem partners to coordinate success.

Rachel Zick, Marketing Manager
Supporting entrepreneurial organizations has been a key aspect of Rachel's experience. This has included roles as Marketing Specialist at ATDC, Program Director at TiE and Executive Director at Atlanta CEO Council. She is the founder of Picaflor Partners, a digital marketing consultancy focused on distilling complex concepts into digestible messages.

# **BuiltTech Labs** : The Board

KP is a globally recognized authority in BuiltTech. Over 25+ years, he has been a technologist, subject- matter expert, founder, CEO, advisor, investor, professor, author and coach. KP formerly ran Enterprise Transformation and Gehry Technologies (Frank Gehry) and was the General Manager of ATDC, one of the oldest incubators at Georgia Tech. While KP started writing code at age 13, he is a Civil Engineer from The Georgia Institute of Technology.

Matt Knight, Managing Director of Shadow Ventures: Matt has been on the bleeding edge of CRE tech for more than a decade as software has been his competitive advantage in the investment market. Matt has more than $1 Billion of career private transactions and has specialized in investing in secondary markets. Matt provides our community the much needed access to seed capital that our community requires.

Arol Wolford is a pioneer and passionate advocate of building intelligence. Arol and his team spent 30 years developing Construction  Market Data (CMD) into a global leader in building. CMD grew from 5 employees in 1982 to 1300 employees in 2000. CMD Group to Reed Elsevier in 2000 for $300 million. In 2000  he became a Board Member of Revit Technology Corporation, creator of the first parametric building modeler. Revit was sold to Autodesk in 2002 for $133 million.

# BuiltTech Labs : The Board



J Cornelius, User Experience 20yr software vet w/multiple exits. Now helping startups & corporate teams build awesome digital products. President of NineLabs, a digital experience agency. J provides insights for our community to build world class products.



Brian Ottaviano - Brian has over 15 years experience with Ernst and Young determining valuations for global Fortune 500 corporations. Brian's background in M&A Advisory provides our community with advanced financial capability.

# Q&Q

kp@kpreddy.co