Big Data, Blockchain and the Arrival of the Smart Organization

Connecting Parties, Systems and Devices
Mission: Digitize the Construction Supply Chain

Brickschain ingests, manages and interprets construction and real estate data. It connects companies, software and devices in real time— all in the effort to improve productivity, reduce risks and ensuring projects end on time and on budget.
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Agenda:

1. Current State of Integration Between Parties in Construction
2. Challenges Around Integration
3. The Brickschain Method for Connecting parties, systems and devices
4. Live Examples

Across Parties, Systems and Devices
Who is Brickschain

First company to market with a blockchain built for construction and capital projects
First company to find product market fit
Certified:

1. Delays in Claims Discovery
2. Schedule & Cost Overrun
3. Ability to Prove Impact Costs
4. Over and Under Payment
5. Loss in Productivity (construction)
6. Warranty
The Built World: The Most Complex Supply Chain
Complex Supply Chain

LINEAR

Walmart

salesforce

bxp Boston Properties

NON-LINEAR
Current State of Solving the Integration Gap
Data Handover: Email and PDF

If construction was a relay team we would finish dead last. Data is generally made into PDFs or Emails and stored in multiple locations.
Example:
Data now exists in at least 5 different silos
If the Question is Changed or an attachment needs updating, all systems need to be coordinated again
If Question = Data and Attachments = Data

Data now exists in at least 5 different silos

If the Question is Changed or an attachment needs updating, all systems need to be coordinated again
Question asked by Subcontractor

Data entered into Word or eSub, made into a PDF and emailed to GC PM

Data received by PM, Reviewed and questions updated

Data entered or imported into GC PM system - Intelligent email sent to Owner

Owner receives intelligent email

Enter into Owner's doc management system
Forwarded to Engineer (entered again)
Forwarded to Consultant

How many systems need to be updated when answered
EVERYONE GETS OUT OF SYNC

ALL PEOPLE ARE UPDATED IN DIFFERENT WAYS AND DATA IS UPDATED AT DIFFERENT TIMES IN EACH SOLUTION
Sledge Hammer Solution

Everyone use MY system!
Some of you may have seen this

Data goes to the ledger first, then to the corresponding player

Shared Ledger

- A/E
- GC
- Owner
- SCs
- Regulators eg. Insurance
- Product and Fabricators

Brickschain Node
Brickschain ingests, manages and interprets construction and real estate data. It connects companies, software and devices in real time — all in the effort to improve productivity, reduce risks and ensuring projects end on time and on budget.
How does Brickschain work?

Brickschain helps to source and organize all of the data within your organization’s workflows, from project management software to email.

Collate

Brickschain is the communicative tissue between third party systems, and ensures everyone speaks the same language in a large project.

Innovate

Not all data is created equal. Everything in Brickschain is immutable thanks to blockchain technology. All parties have their own version of the truth, forever. No single point of failure means data is secure.

Preserve
Power tools.

These are the building blocks of Brickschain, and when combined these tools give you powerful insight.
Brickschain’s power comes from its ability to speak with dozens of project management software programs and IoT devices. Brickschain allows a CMiC program to speak to Procore, and facilitates massive savings in paperwork and double data entry in the process.
Brickschain reads industry documents
Brickschain connects and runs smart devices
Predictive Analysis: predict mold growth in a building

Based on real data. Saves companies money and averts disaster.
Transparency in Fabrication and Procurement

85% of companies say they have no transparency in the Procurement and Manufacturing Process on a project. Brickschain tracks the submittal schedule in real time across all parties.
Tracking assets by room and location provide transparency to total cost of ownership, warranty repairs and tracks recalled product to keep your projects and buildings safe.
Connects internal and external systems effortlessly

Whether connecting an accounting and project management system in your company or gluing together multiple accounting systems across companies for Joint Ventures, Brickschain connects all software and cloud environments.
Connects material and labor on bridge and road projects

Brickschain tracks manufacturing of aggregate, material delivery, and installation. Any cracks can be tracked to location and material batch.
Industries served

- Commercial Construction
- Multi-family and Residential
- Oil and Gas
- Healthcare
- Retail
- Heavy Industrial
- Bridge and Roads
Collaborate and share data safely
There's no double entry with Brickschain. Input into a project management system is automatically reflected on the blockchain.

Own Your Data
If a building is sold, the ledger can be easily transferred. Owners will have a living, breathing database for the provenance of every item in their building.

Immutable security on the blockchain
An immutable ledger is created for the current and future owners of a building. The history of every action is maintained forever.

Move data from cloud environments effortlessly
Inputs are registered on the blockchain in real-time, and from all platforms, including email, Slack, Dropbox and Google.
Run the company you've always run

Keep your existing project management system. This isn’t a massive new software roll-out, it’s a backend system that takes care of your data.

Use Brickschain to weave it together

Feel the power of your systems connected. Brickschain is weaving the fabric of Big Data for the built environment.