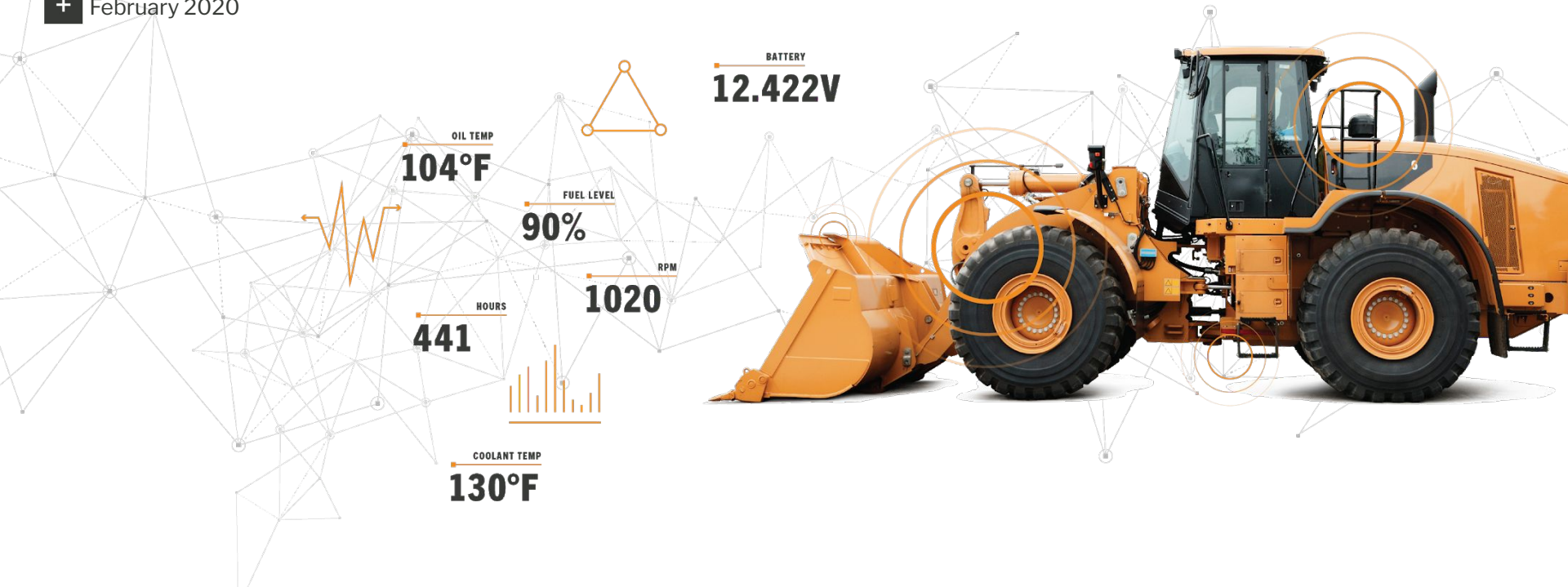
# CONSTRUCTION'S GOT A PRODUCTIVITY PROBLEM

## AND THE ONLY SOLUTION IS MORE *CONNECTIVITY*

+ February 2020



## WHO EVEN ARE YOU GUYS?

**LARRY DAUGHERTY**
Director of Channel Partners

**AMBER FEHRENBACHER**
Marketing Director

## WE'RE HELPING CONTRACTORS GET MORE DONE

EquipmentShare

(not us but would be way cooler if it was...)


INTRO

# WHAT IS AN EQUIPMENTSHARE?

EquipmentShare is a construction technology solutions provider and equipment rental service.

1. Founded in 2015 in Columbia, MO
2. With over 40 years of combined experience in commercial and residential construction, brothers Jabbok and Willy Schlacks, along with 3 co-founders also native to Missouri, pitched and won Startup Weekend
3. Accepted to top tech accelerator Y Combinator in Mountain View, CA and received initial seed round of funding to help solve for the challenges across construction leveraging technology and data to produce contractor-focused solutions
4. Returned to Mid-Missouri to tackle the problems they faced daily as contractors and expand their footprint to help develop better, smarter ways to procure equipment, increase utilization and manage risks on the jobsite and across mixed fleets and jobsites
5. Currently operating 40+ rental yards across 21 states

# EQUIPMENTSHARE
# 5 YEARS LATER

We offer traditional aerial and dirt rentals across the U.S and have a product suite that provides direct value for contractors and fleet owners. All of our rentals come standard with our technology **EquipmentShare Track**.



BTE (Bluetooth Mesh Network)


Sentry Keypad


Dash Cam

Link Mobile App

E-Logs Mobile App


Robotics & Automation


Geofencing


Digital Work Orders

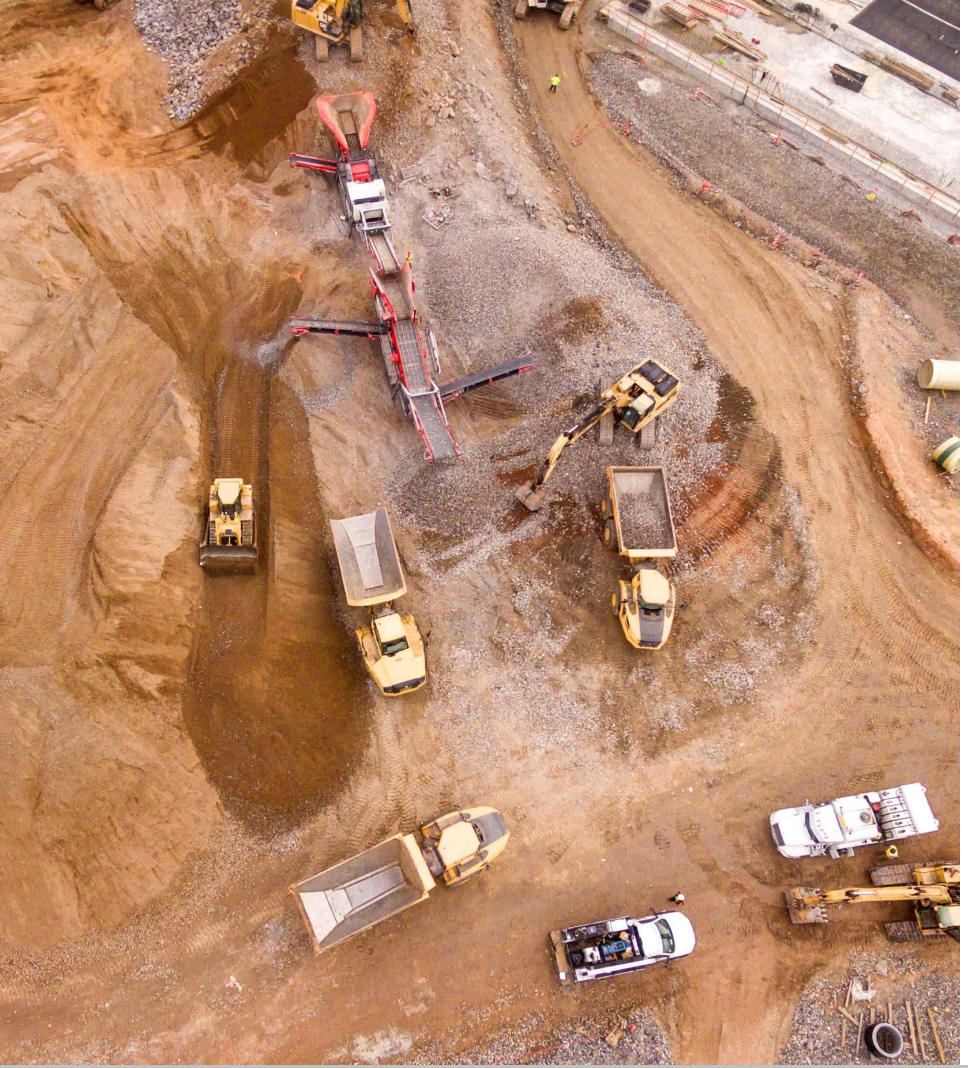
SMART JOBSITE TECHNOLOGY

# EQUIPMENTSHARE'S MISSION

EquipmentShare's flagship product is our smart jobsite technology, Track. **Our platform of solutions also includes Rent, our equipment rental service, and Own, our retail sales division.**

Our mission is to offer contractors a better way to manage mixed construction fleets by leveraging technology solutions to work smarter, more efficiently and increase productivity.

Our founders' experience as contractors gives us keen insight into the productivity problem affecting the construction industry.



THE PROBLEM

# PRODUCTIVITY DECLINE IN CONSTRUCTION

The construction industry sees downturns in productivity every year.

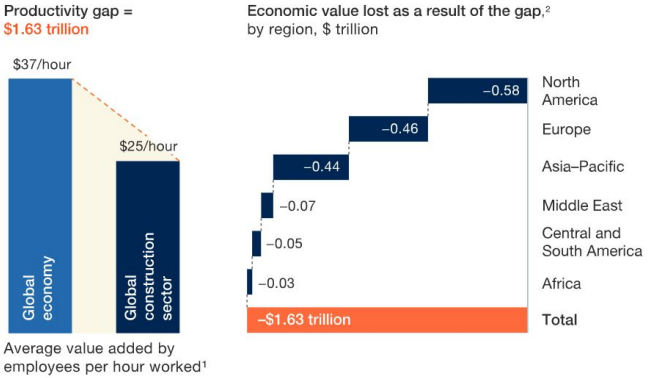
According to the consulting group McKinsey & Company, the global **construction industry's annual productivity rates have stagnated, while the manufacturing industry rates have doubled since 1995.**

THE PROBLEM

# PRODUCTIVITY DECLINE IN CONSTRUCTION

This gap **costs the construction industry $1.6 trillion every year.**

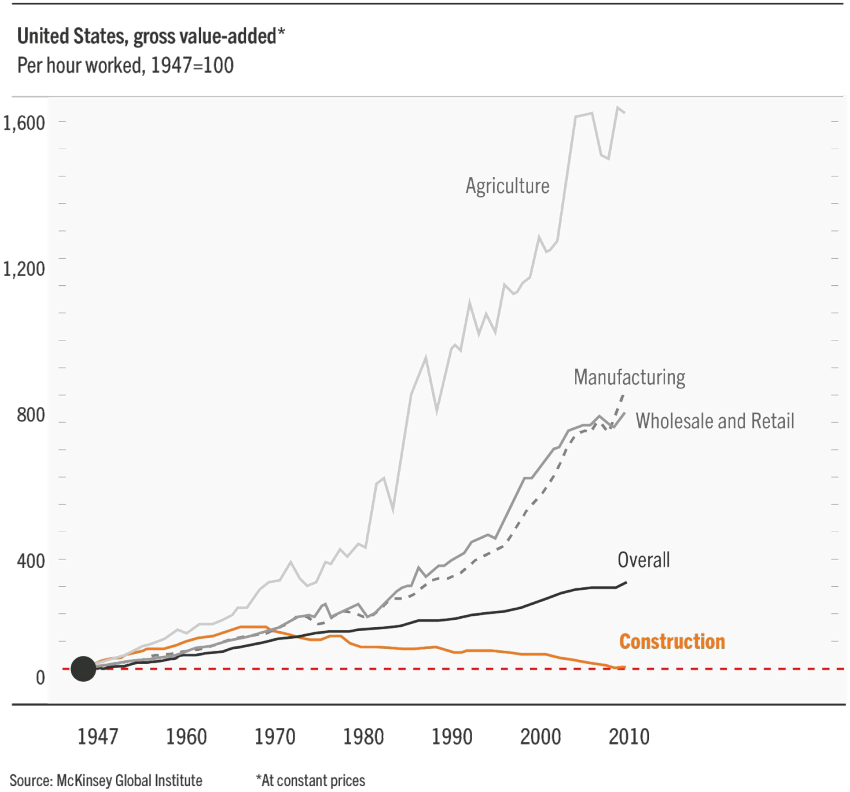
Lagging construction productivity costs the global economy $1.6 trillion a year.




[1]2015 data in real 2005 dollars.
[2]Assumes construction productivity catches up with total economy productivity and current workers are reemployed at the total economy productivity rate.

McKinsey&Company

## Comparing Productivity Rates Across Industries




Source: McKinsey Global Institute *At constant prices

THE PROBLEM

# WHAT'S CAUSING THE LACK OF GROWTH IN CONSTRUCTION?

Industry professionals witness these bottlenecks daily:

+ Lack of visibility across assets, jobsites, tools and people
+ Poor organization
+ Inadequate communication
+ Poor short-term planning
+ Insufficient risk management

These pain points are felt across the industry and have been felt for decades.

Combined, they can be summarized as **a lack of visibility.**

THE PROBLEM

# LACK OF VISIBILITY

Consider this: Public works, city planning and commercial construction are all lines of work that involve multiple moving parts that are hard to keep track of and create bottlenecks of information.

+ OEM-specific telematics solutions
+ Various communication tools that don't work in tandem
+ Dated and unofficial ways of recording maintenance, service or repair information for an entire city fleet

There's a fundamental lack of visibility across most organizations in this industry.

THE PROBLEM

# POOR ORGANIZATION

Many firms experience a lack of organization around  the procurement process, project budgeting and compiling or recording pertinent data.

A central place for data storage or information sharing doesn't exist, or the procurement process is disjointed.

+ Where do you currently store important information?
+ Can everyone who needs that information to do their job access it easily and quickly?

THE PROBLEM

# UNCLEAR COMMUNICATION

When multiple projects take place at once, communication lines get tangled and misinformation spreads easily.

Poor communication is an obstacle standing in the way of project completion or crucial next steps.

+ How does your team or organization communicate important data or information?
+ What is your team's process for communicating the status of a project?

THE PROBLEM

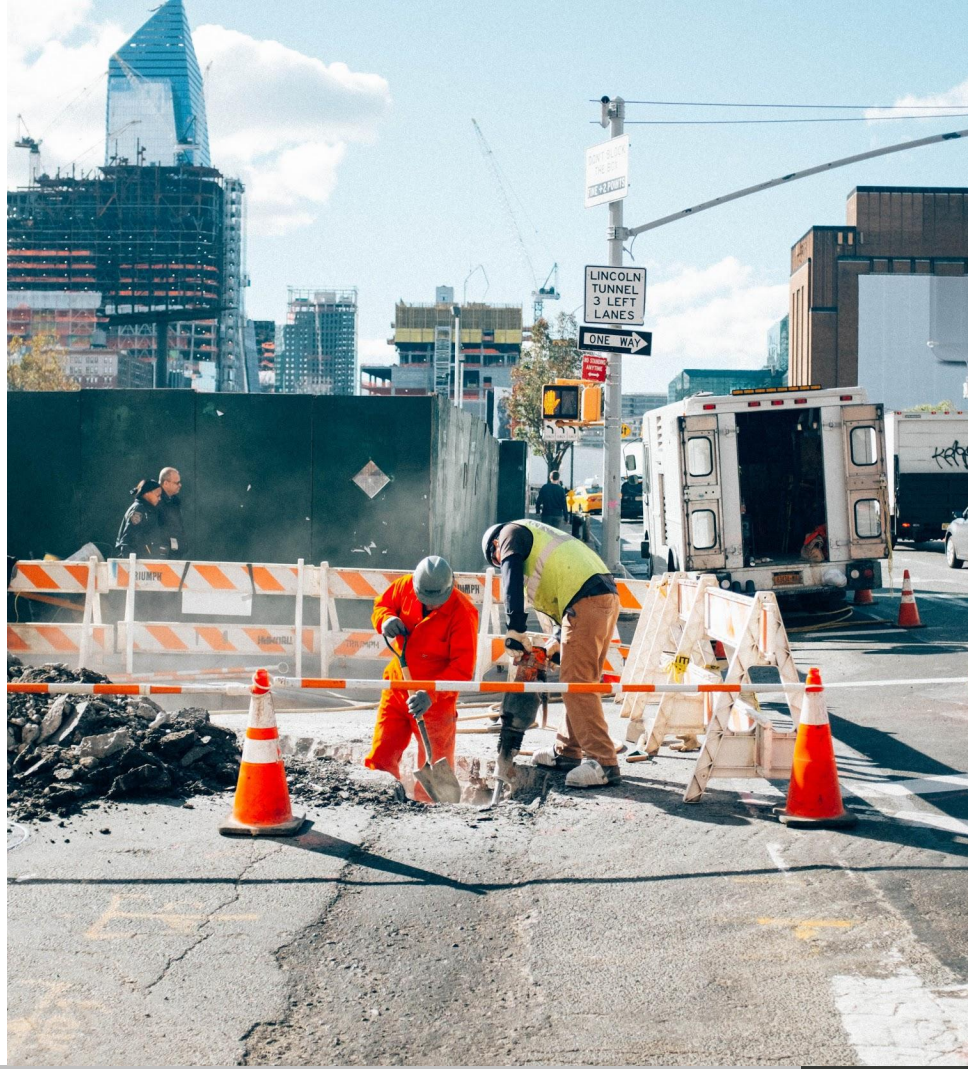
# LACK OF SHORT-TERM PLANNING

Looking ahead to the next few weeks of work is cumbersome for many construction firms and professionals.

Without planning for the short term, though, contractors can find themselves in tough situations:

Showing up on a jobsite without the proper equipment; staffing problems and billing difficulties. All of this affects how efficiently a project is completed.

+ How does your team plan for the short term?
+ How does your team prevent or prepare for work stoppages?



THE PROBLEM

# INSUFFICIENT RISK MANAGEMENT

Proper risk management is vital to not just the success and livelihood of an organization, but also to the safety of employees and operators.

Managing risk on a daily basis is crucial for overall project efficiency. **Theft, accidents and machine failure** can all be reduced with proper risk management.

Additionally, these factors directly affect how efficiently a project is completed and can even completely halt a project's progress and incur at times, debilitating costs to your or your employer's business.

+ What is your organization's current method for managing risk?

THE PROBLEM

# DOWNTIME AND IDLING MACHINES

Machine idling and unplanned downtime directly affect productivity on projects with heavy machinery. Without fully understanding how, when, where and by whom machines are being utilized, contractors and construction professionals are unable to fully maximize their machine utilization rates.

Planning for downtime and minimizing machine idling allow for firms to maximize machine utilization and work more efficiently.

+ How does your team currently track and analyze machine or vehicle utilization rates?

THE PROBLEM

## HOW DOES THE INDUSTRY CURRENTLY MANAGE WORK?

The construction industry largely relies on outdated ways of doing work.

+ Pen and paper
+ Unreliable and inconsistent means of recording data
+ Doing things the way they've always been done
+ Spreading information through unofficial streams of communication

The result:

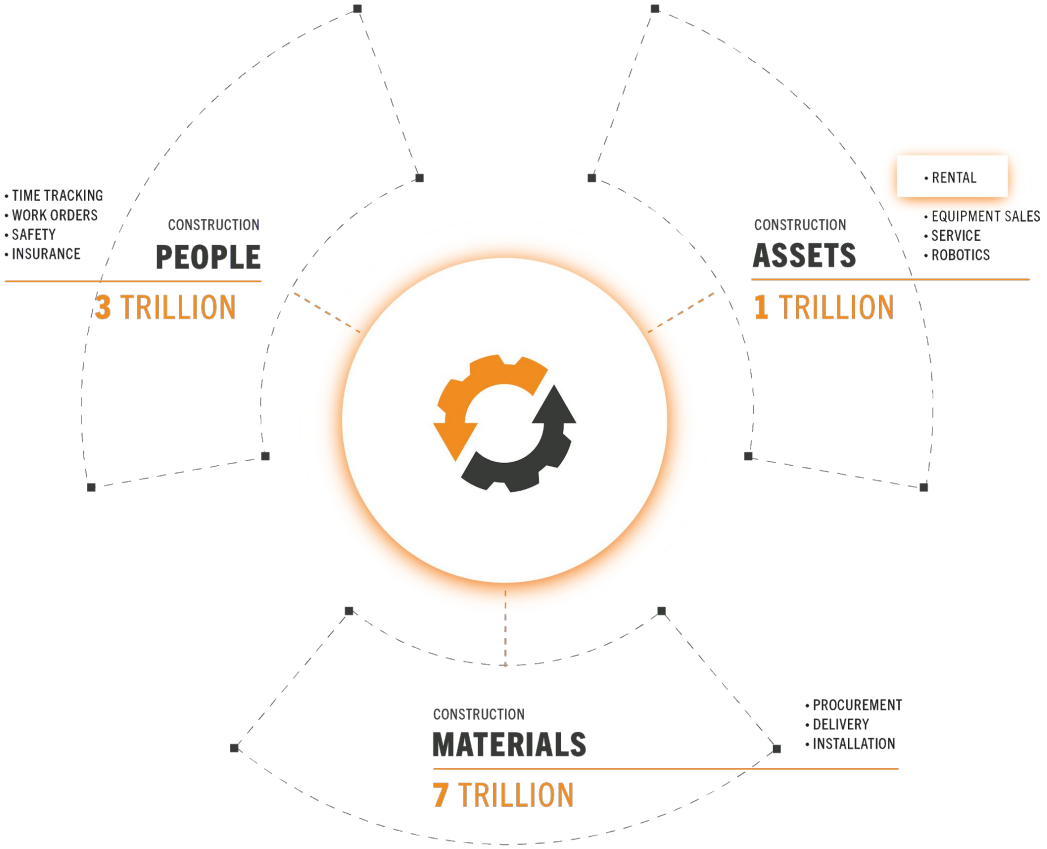
+ Records are scattered and hard to locate
+ Data may be incomplete or inaccurate
+ Communication is slow and inefficient
+ Decisions are made based on guesswork and estimation
+ Projects come in over budget and late

THE SOLUTION

# TECHNOLOGY OFFERS A SOLUTION

Connect the jobsite.

Traditional telematics available on the market for the past 20-30 years is not alone enough to solve for reversing productivity decline seen across the industry despite the current spending outlook set to increase across commercial and industrial sectors.




THE SOLUTION

# TECHNOLOGY OFFERS A SOLUTION

Technology and Iot (Internet of Things) solutions offer an answer to the question,

**“How does construction become productive again?”**

The growth of the IoT in construction market is primarily triggered by the growing need to avoid project delays through better productivity and safety. According to a new market research report *"IoT in Construction Market by Offering and Region - Global Forecast to 2024"* by MarketsandMarkets™, **the IoT in Construction Market is projected to grow from $7.8 billion in 2019 to $16.8 billion by 2024.**

THE SOLUTION

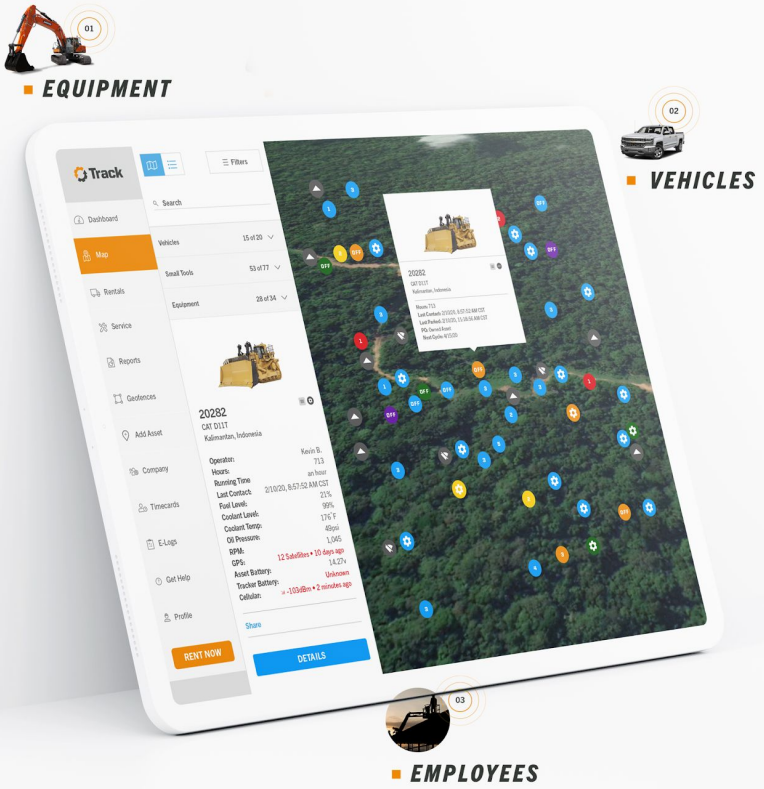
# TECHNOLOGY THAT PROMOTES VISIBILITY

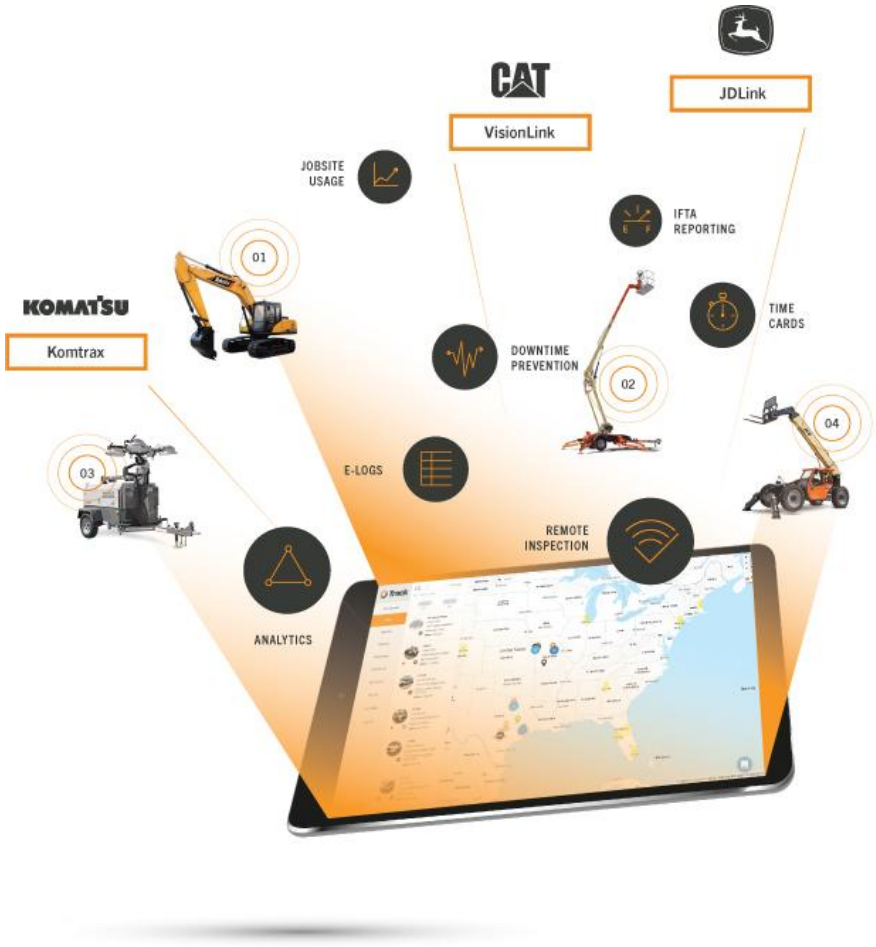
Technology provides construction professionals with ways to manage work more efficiently and with an increased level of visibility.

The industry needs one centralized technology solution to provide visibility to historically “invisible” parts of work. Traditional telematics solutions, dated record keeping processes and OEM-specific platforms silo information.

**Smart jobsite technology restores visibility to every aspect of construction work, not just equipment or vehicles location or utilization rates.**

**Understanding the entire holistic industry comprised of assets in addition to the people doing the work and the materials being used and how and aggregating that in a meaningful way allows us to truly address the productivity problem.**






THE SOLUTION

## WHAT IS SMART JOBSITE TECHNOLOGY AND IOT?

Smart jobsite technology makes formerly “invisible” or “hard-to-see” aspects of your jobsite visible, transparent and easy to access.

IoT stands for “Internet of Things,” and IoT is currently permeating the construction industry. IoT technology connects various machines, objects and people through the Internet, which creates the visibility we’re after.

RESTORING VISIBILITY

# WHAT DOES SMART JOBSITE TECHNOLOGY DO?

Smart jobsite technology monitors and gathers thousands of data points from:

- Machines
- Buckets and Attachments
- Vehicles

Unlike traditional telematics solutions, smart jobsite technology is OEM-agnostic and will run on mixed construction fleet to create a full picture of data from a jobsite.

RESTORING VISIBILITY

# ACCESS CONTROL

Access control creates visibility around machine and asset utilization. With access control technology, project and safety managers can:

+ See who is using and operating equipment
+ Replace the universal key
+ Eliminate theft risk
+ Assign unique access codes to operators to ensure only trained operators can run machines

**How does it make construction more productive?**

+ Keep machines on the jobsite where you need them and only operated by authorized employees

RESTORING VISIBILITY

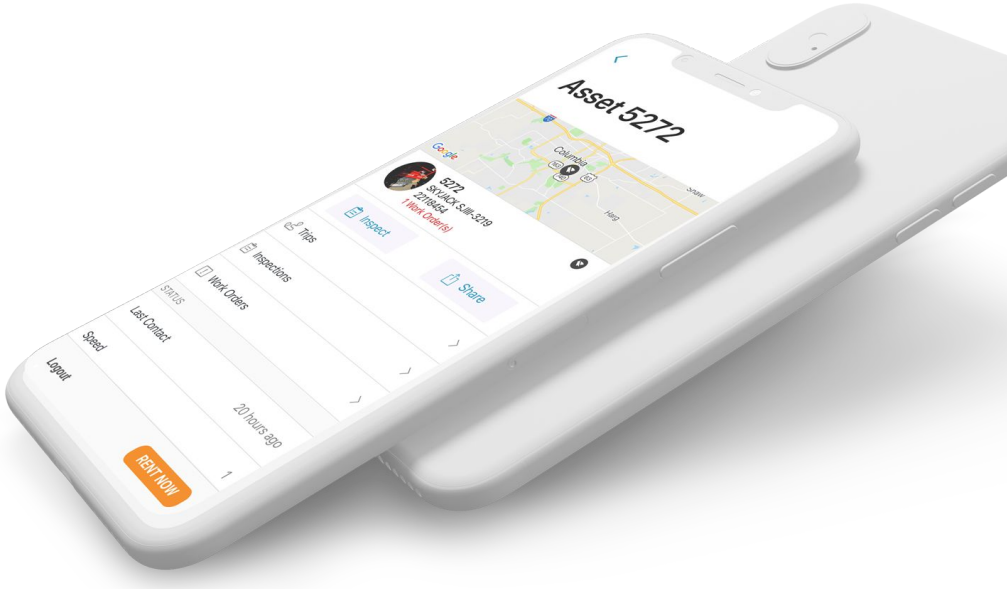
# REAL-TIME ALERTS

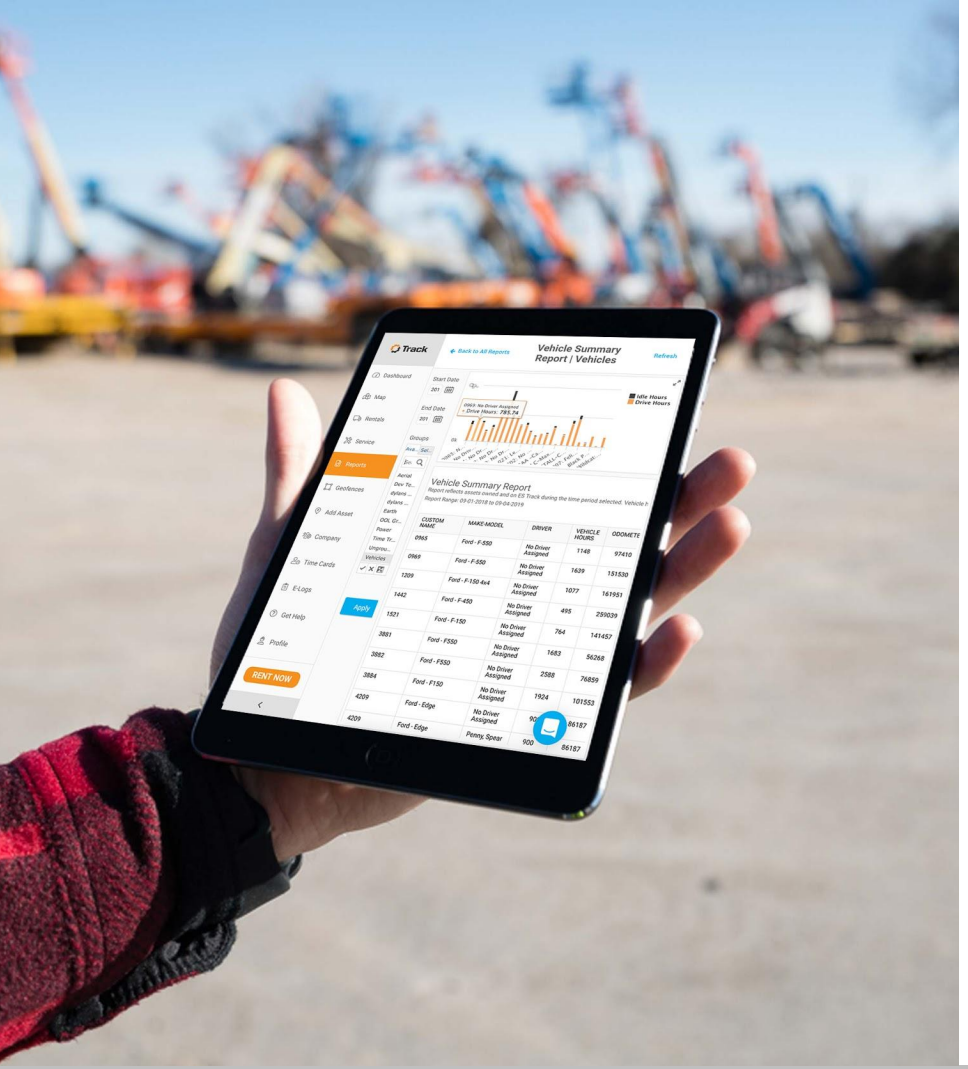
Real-time alerts provide visibility around machine utilization and operator behavior. Smart jobsite technology monitors the following:

+ Aggressive driving behavior
+ Machine fuel levels
+ DEF status
+ Engine performance parameters
+ Planned maintenance timing and status

**How does it make construction more productive?**

+ Real-time alerts and machine monitoring allow contractors to easily capture data that is normally difficult to compile accurately.






RESTORING VISIBILITY

# HISTORICAL RECORDS IN A SINGULAR PLACE

Firms and contractors lack a historical understanding of used and rented machines, which makes it hard to prepare for and prevent breakdowns or failures.

Smart jobsite technology would create a historical utilization report for machines so contractors can easily see:

+ Machine job history
+ Hours worked
+ Previous  rental utilization
+ Maintenance history and engine failure history

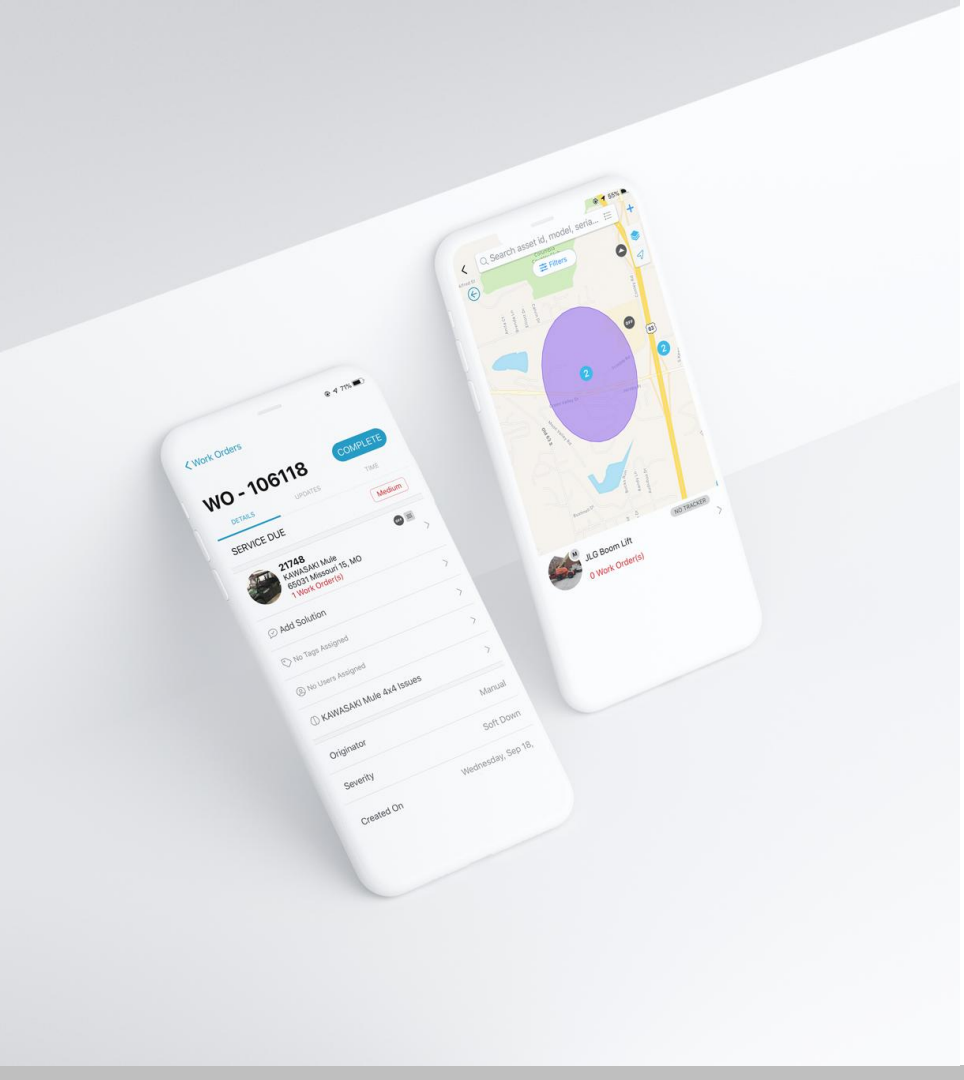
This information up front helps construction professionals make informed decisions about the assets they use on each job.

RESTORING VISIBILITY

# CONNECTING AND TRACKING BUCKETS AND ATTACHMENTS

When heavy machinery and large assets go missing or are stolen, the financial burden is felt. Buckets and attachments are often misplaced or stolen, and the replacement cost adds up over time. Additionally, searching for missing pieces also slows down project progress.

Smart jobsite technology connects buckets, attachments and implements to a central tracking dashboard to prevent theft and loss.

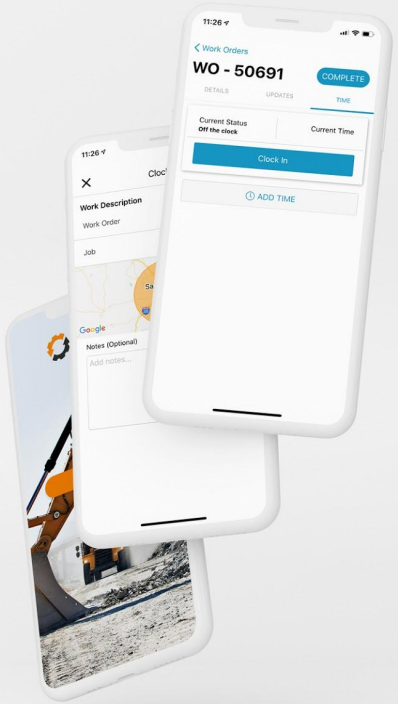



RESTORING VISIBILITY

# DIGITAL WORK ORDERS

A digital work order solution eliminates written work orders and create historical records around every machine's maintenance history.

A digital work order creates not only a common place for maintenance information to be stored, but it also cuts down on diagnostic and service time: A digital work order can be created quickly and relayed to service techs easily.




RESTORING VISIBILITY

# TIME TRACKING

Like work orders, traditional time-tracking is done on paper and is unreliable, inaccurate and unorganized.

A digital solution for time cards allows management to approve, assign and view worked hours, and employees are able to clock in and out digitally.

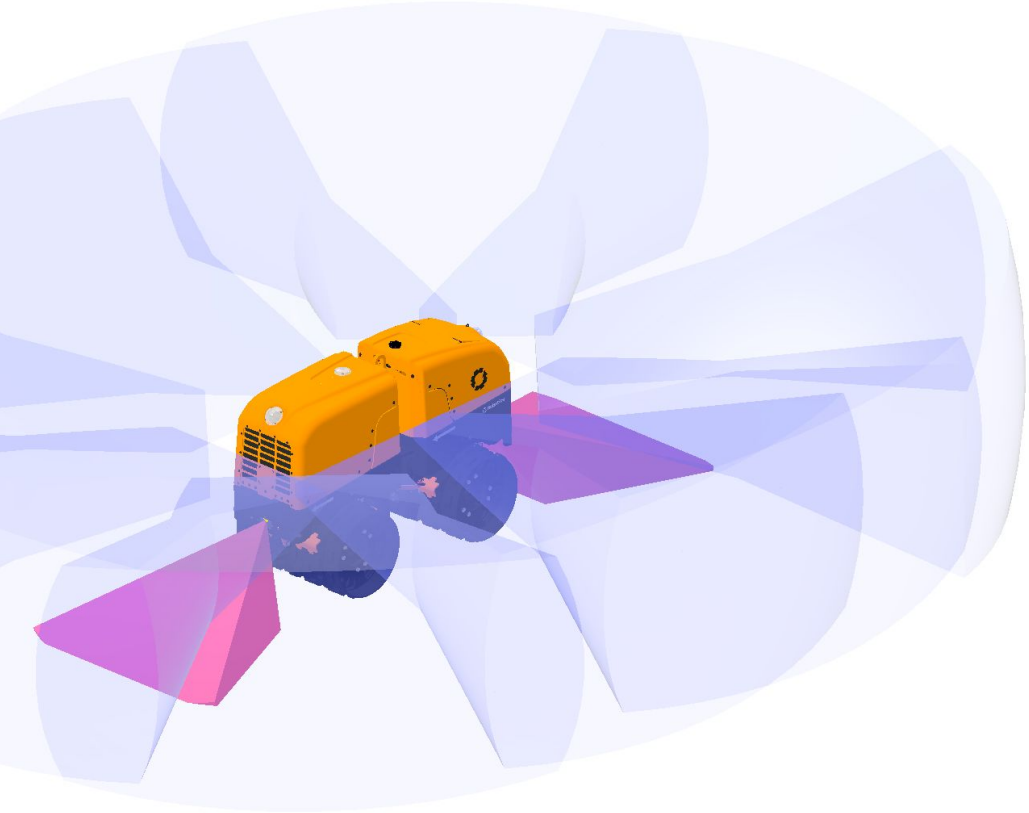
Management can approve, assign and view hours, as well as edit Time Cards, from the Track browser app.

THE SOLUTION

# CONSTRUCTION AND AUTOMATION

Construction automation is also a factor in restoring visibility to the industry and helping firms get more done.

The average big construction project takes **20%** longer to complete than planned and runs a staggering **80%** over budget. It's easy to see why construction automation has become a hot topic.



THE SOLUTION

# CONSTRUCTION AND AUTOMATION

Automated construction tools could:

+ Increase output
+ Enhance safety
+ Improve precision and accuracy

In turn, construction automation could clearly increase productivity.

THE SOLUTION

## AUTOMATION AND SAFETY

Construction automation solutions enhance jobsite safety and keep projects moving by removing humans from dangerous work conditions.

+ Prevent humans from undergoing repeated stress and injury
+ Allows firms to get work done without risking injury or death of skilled workers
+ Fills the gap caused by the nationwide shortage of construction workers
+ Enable work to be completed faster by removing human from conditions that require meticulous safety precautions

THE SOLUTION

# AUTOMATION ALLOWS FOR INCREASED OUTPUT

Construction automation allows employees to get more work done. Automated construction tools can work alongside or in tandem with employees to increase output without added effort.

+ **Skilled laborers can focus on experience or skill-based work**
+ Automated construction tools can handle repetitive, monotonous and non-skill-based work

THE SOLUTION

# AUTOMATION IMPROVES PROJECT ACCURACY

Automated construction tools constantly monitor, track and record every action performed on a job, and because automated construction tools are powered by software and a computer, their results are more accurate than that of a human's.

Our automated compactor, for example, creates a report after each completed project to summarize the work that has been done and detail compaction grade and other pertinent details.

THE SOLUTION

# AUTOMATION AND SMART JOBSITE TECHNOLOGY

**The result:**

+ Increased awareness of project progress, status and happenings
+ A singular place for storing data
+ Enhanced transparency across teams, functions and entire organizations
+ Increased output driven by automated tools performing repetitive work


THE SOLUTION

## LOOKING FORWARD

As we look forward, a construction industry where productivity grows each year and output increases is not unimaginable.

Smart jobsite technology connects the pieces across projects that formerly seemed “invisible” to create a digitally connected and transparent work environment.

This transparency allows us to get more done.

THE END

# THANK YOU MAPA FOR HAVING US!