ADAPT OR DIE

The Impact of Technology on Traditional Industries

Lithko CONTRACTING, INC.

IT CONFERENCE FOR CONSTRUCTION PROFESSIONALS

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TODAY'S AGENDA

1. Introductions and Housekeeping

2. The Imperative to Adapt
   - Bill Wagner: Penta Technologies Inc.

3. The Impact of Technological Disruption in Construction

4. Next Steps: Simple guidance for Technological Transformation inside your Construction Company
   - Ryan Hale: CIO & Director, Strategic Initiatives – Lithko

GOALS FOR TODAY

Everybody's Talking About This Topic

- YPO – Singularity 2018
- YPO – Construction and Tech GCC on Technological Disruption
- BuiltWorlds – Project Delivery Conference

So we want to frame the background.

And arm AGC members with some simple steps they can take to get ahead of the curve.

NOTHING LASTS FOREVER

20 YEARS
in 2019

60 YEARS
in 1950

The average age of a member of the S&P 500, according to Credit Suisse.

63%

of executives believe their companies are currently facing some type of disruption, according to the Accenture Disruptability Index.

68%

of C-Suite members expect their industry to be significantly disrupted in the next three years.

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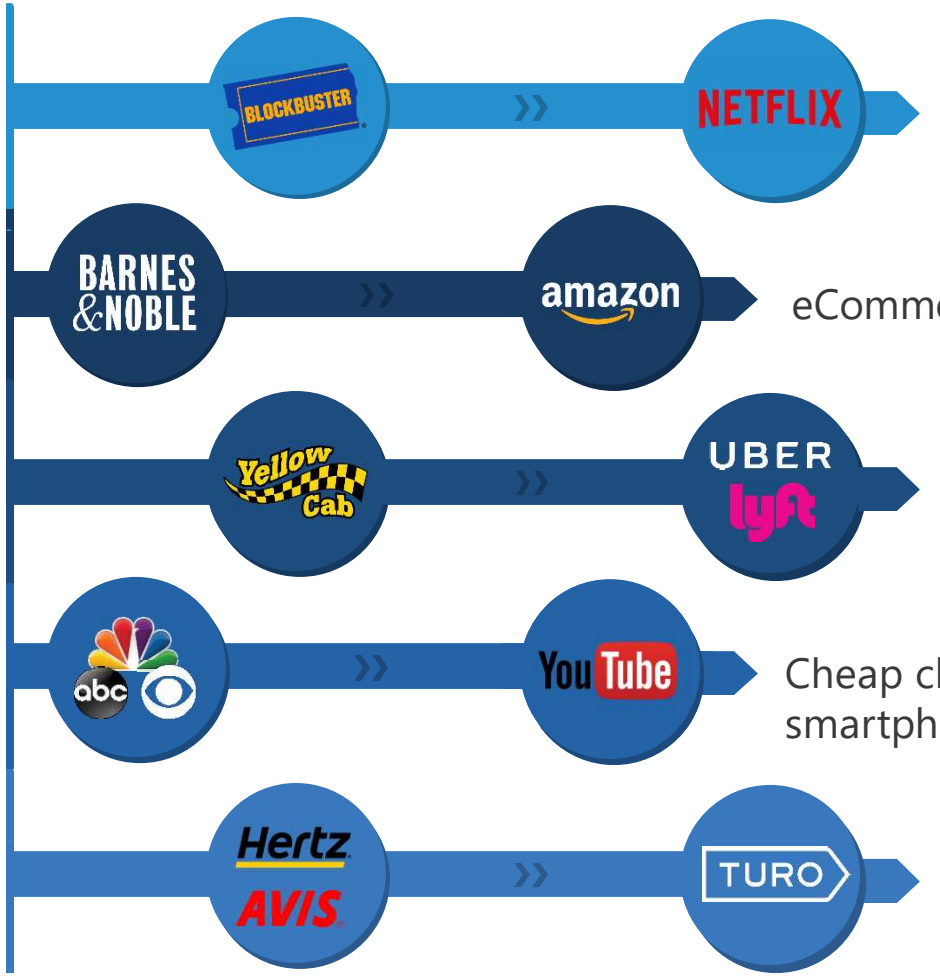
NOTHING LASTS FOREVER



Home delivery of movies, eventually shifted to streaming content online and publishing

eCommerce platforms for retail

Proliferation of both the 'Gig' economy and smartphones

Cheap cloud storage and the proliferation of smartphones

Proliferation of smartphones and the cloud

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THE ECONOMICS OF DISRUPTION

Walmart's annual revenue is over $500B, roughly twice Amazon's annual revenue of $240B. Yet, Amazon's market cap of $885B is more than three times Walmart's market cap of $280B.

The market loves a tech-powered growth engine.

THE IMPACT ON TRADITIONAL INDUSTRY

All industries are feeling the push to greater productivity.

Even when the disruption is not existential, it still happens.

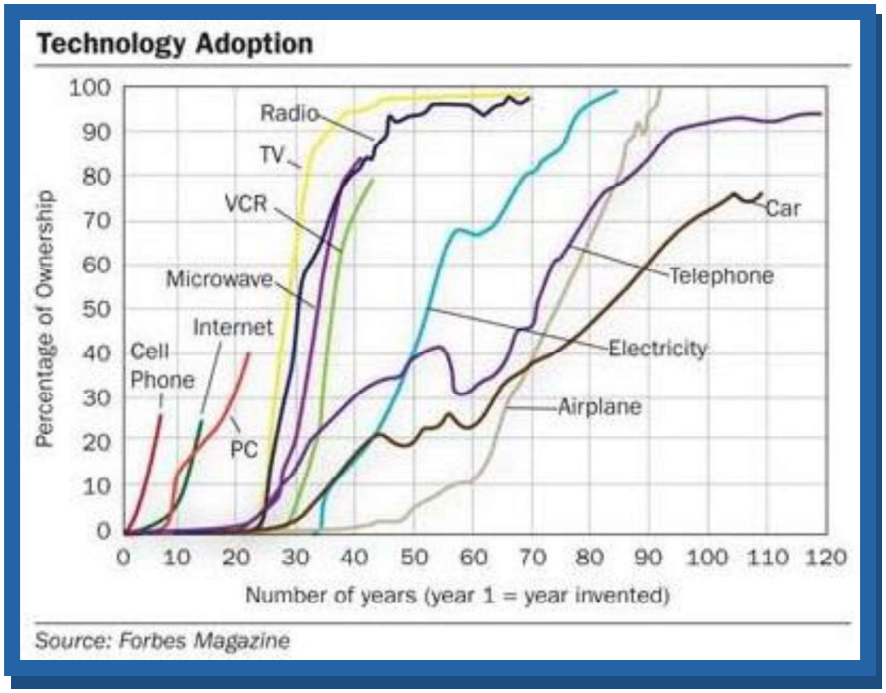
This push is typically fueled by some type of technological innovation:

- Artificial Intelligence
- Connected Computer Networks
- Mobile Computing Devices
- Big Data
- Predictive Analytics

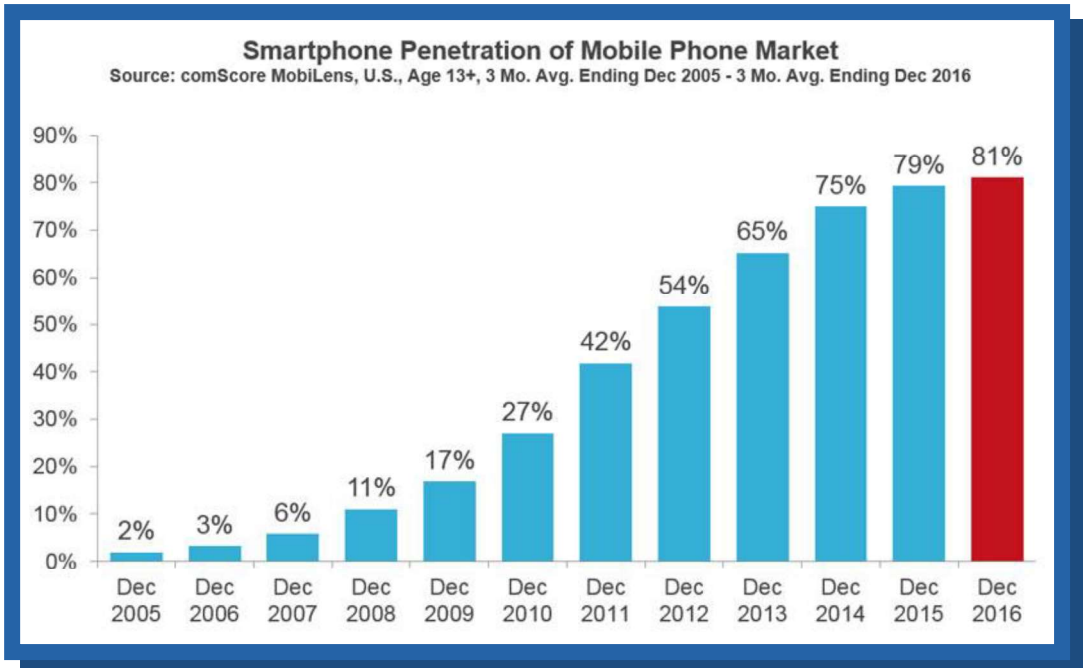
NY TIMES ADOPTION OF TECH

Technologies are being adopted at geometrics rates… faster than ever before.

Digital natives are not only in the workforce…they're running companies and making strategic decisions.



SMARTPHONE PENETRATION



More than 80% of people over the age of 13 have a smartphone.

5G networks are right around the corner, bringing broadband speed to the Internet of Things.

THE "LAST MILE" IS NO LONGER SAFE

Disruption happens to all industries, even ones that cover the "last mile" with labor-intensive processes like construction.

Expensive labor costs attract technological disruptors:

- **Retailers**: cashier-less checkout, kiosk-based ordering, eCommerce
- **Distribution Channels**: BI-driven supply chains, automated warehouses
- **Service Providers**: "Gig" economy, digital enablement tools

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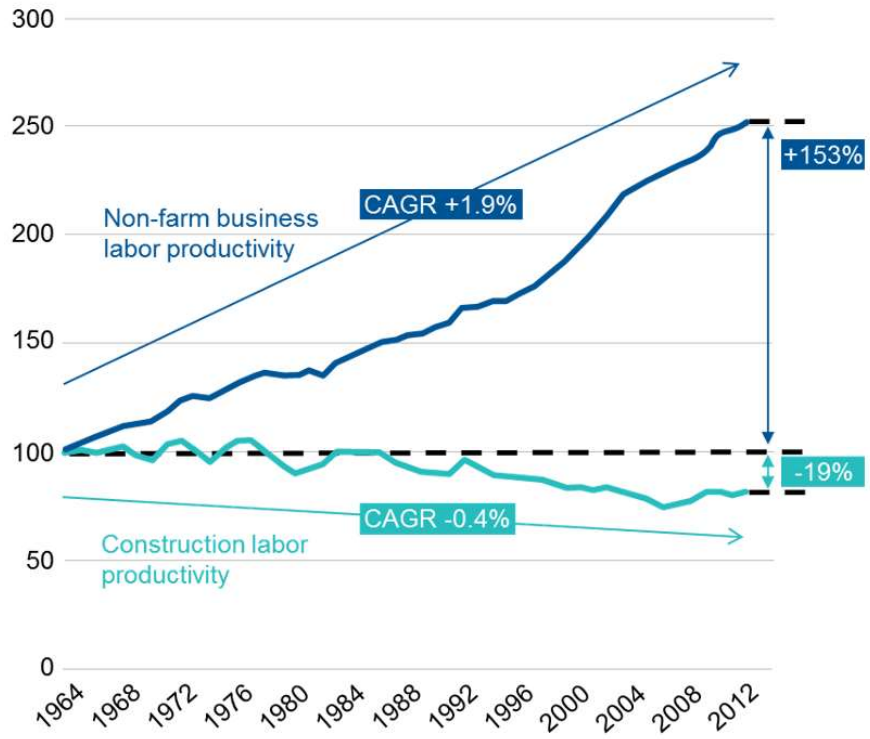
DISRUPTION IS COMING FOR CONSTRUCTION

The construction industry faces a productivity problem.

Construction is an industry where the process is the product.

We have an aging workforce, face increased regulatory pressures and are saddled with rising material costs.



DISRUPTION IS COMING FOR CONSTRUCTION

McKinsey survey of large capital projects showed that large projects are, on average, **take 20% longer to complete** and those large projects **cost 80% more than planned.**

In the meantime, construction continues to spend far less on R&D and technology than most other industries:

- **Less than 1%** of revenue on R&D
- **Less than 1%** of revenue on information technologies

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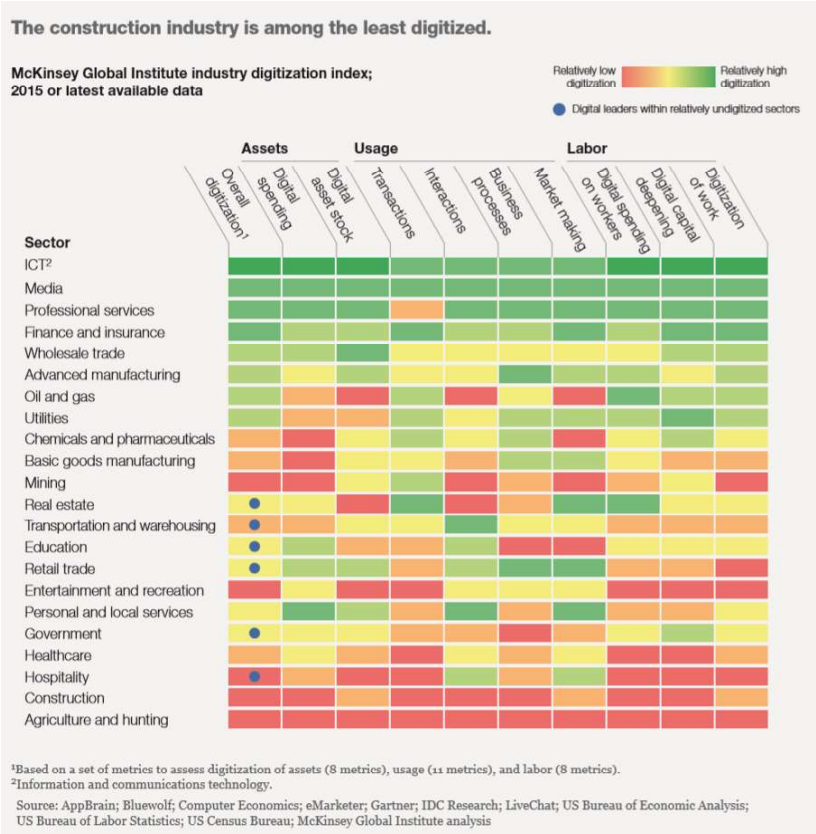
DISRUPTION IS COMING FOR CONSTRUCTION



The construction industry is not well-positioned for this shift as it trails most industries in its level of digitization.

Meanwhile, large construction technology vendors are aggressively consolidating the ConTech space through acquisitions.

DISRUPTION IS COMING FOR CONSTRUCTION

April 2018
Trimble purchases Viewpoint Software for **$1.2B**
- Trailing 12-month revenue of **~$240M**

February 2018
Trimble purchases eBuilder for **$500M**
- Trailing 12-month revenue of **~$53M**

January 2018
SoftBank leads over **$865M** investment in Katerra, driving valuation to **>$4B**
- Trailing 12-month revenue of **~$2B**

November 2018
Autodesk purchases PlanGrid for **$875M**
- Trailing 12-month revenue of **~$100M**

December 2018
Autodesk purchases BuildingConnected for **$275M**
- Trailing 12-month revenue of **~$10M**

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DISRUPTION IS COMING FOR CONSTRUCTION

5 Big Ideas currently driving disruption:

01

Geolocation Tools & Higher Definition Surveying

Drones and smart devices are powering this revolution in the way sites are managed

02

5-D Building Information Modeling

Adding cost and timeline to building models improves project outcomes

03

Digital Collaboration & Mobility

Information is always available as jobsites become more digitally connected

04

The Internet of Things and Advanced Analytics

Jobsite data is being collected and connected at unprecedented rates

05

Future-Proof Design & Construction

Advances in materials science are transforming building processes

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WHAT SHOULD WE DO?

In the next section of this presentation, we'll talk to Lithko, an industry thought leader, who's making the shift to embrace digital technologies inside their organization.

Lithko connects their back office and field teams with collaborative business processes supported by cutting-edge digital tools.

LITHKO'S BURNING PLATFORM FOR CHANGE

OR

Since our start in 1994, have grown to the 2nd largest concrete contractor in the nation* with 16 offices and 3000 coworkers/subs.

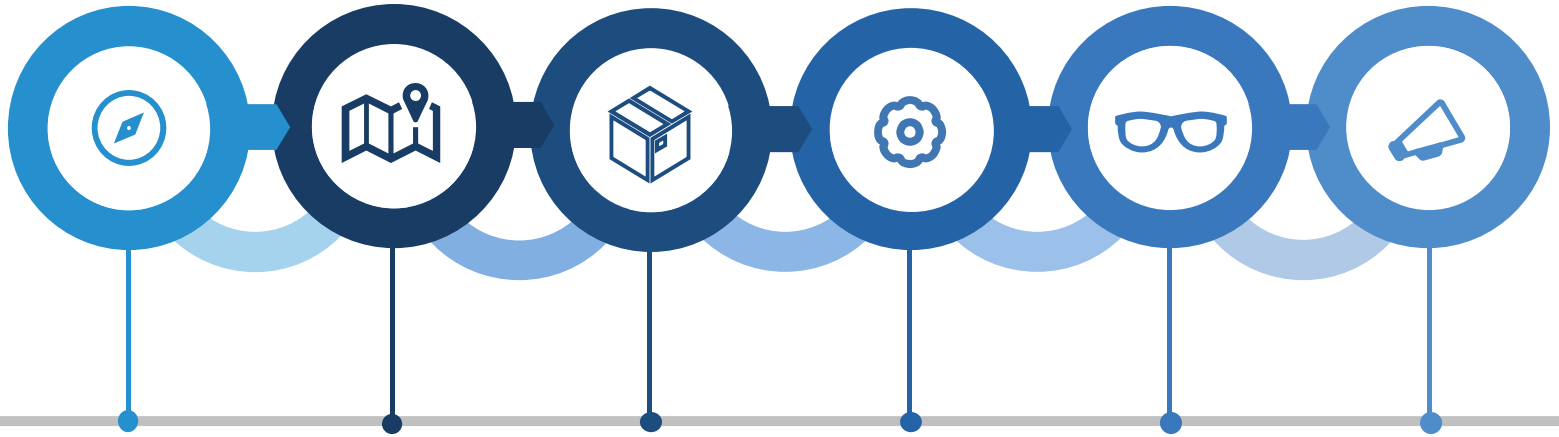
Until 2017, we operated the business on a series of spreadsheets, a green-screen ERP system with 5 users, and "push" reporting.

Our historic approach was just not scalable.

*Engineering New Record Top Specialty Subcontractors 2017 and 2018

THE WAY WE LOOK AT TRANSFORMATION

OUR RECIPE



Understand pain points & develop the guiding coalition

Prioritize & develop a roadmap

2 In-a-Box

Start with a process

Provide 100% Transparency to build trust

Communicate, Communicate, Communicate ...and then broadcast success

LESSONS LEARNED FROM OUR JOURNEY

Lithko CONTRACTING, INC.

There's no right answer to any of this.

Our approach takes 3x as a long up front…and makes implementation 5x easier.

For all initiatives, go out of your way to pair a technology and business partner together with a common goal – they win or lose as a team.

Don't be side tracked by opinions and theories - drive the conversation to process, responsibilities, data flow…and then systems.

Reward your teams for elevating risks and issues early.

"The business won't do what it doesn't understand" - tailor communications to each stakeholder group and make each interaction count.

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THANK YOU!

Learn more about Penta's ERP solutions at **penta.com**
or call us at **(262) 782-7700**.

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