

# Building a Tech-Driven Culture in Construction Construction Technology Services

July 24, 2025

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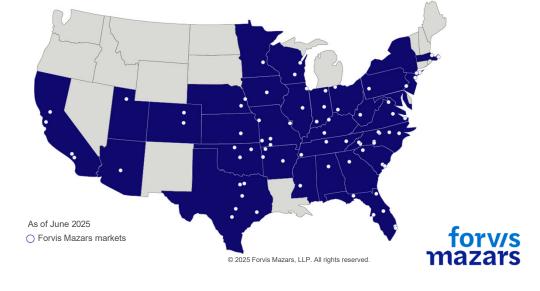


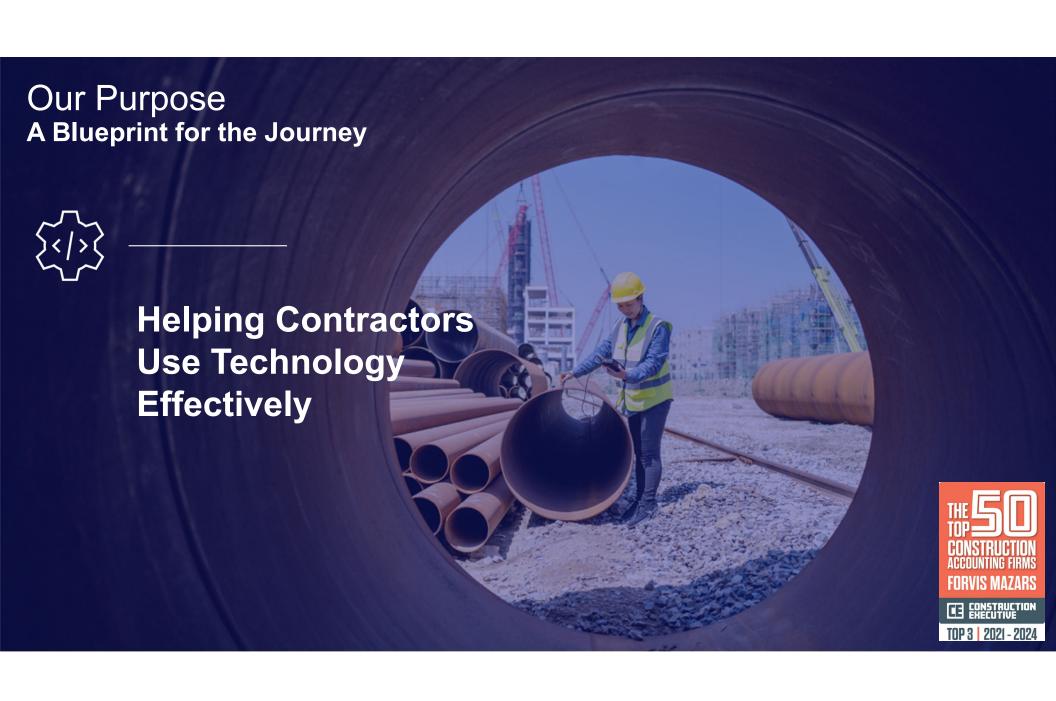


#### **Built for Forward**

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## Construction Technology How We Help





Deliver Results **Exceed Expectations** 









# Construction Technology Our Approach

Drive Adoption Increase Value



EFFICIENCIES IMPACT GROSS MARGIN



LEVERAGE AN EXPERIENCED TEAM



**DRIVE USER ADOPTION** 

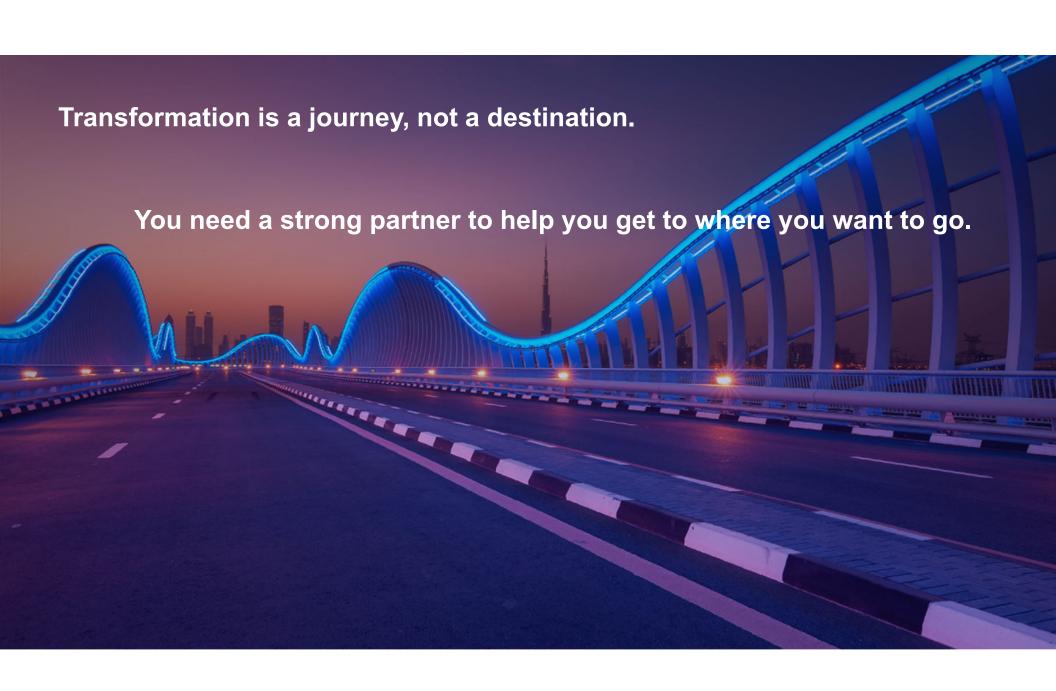
SELECT THE RIGHT TOOL FOR JOB



MANAGE THE SCHEDULE



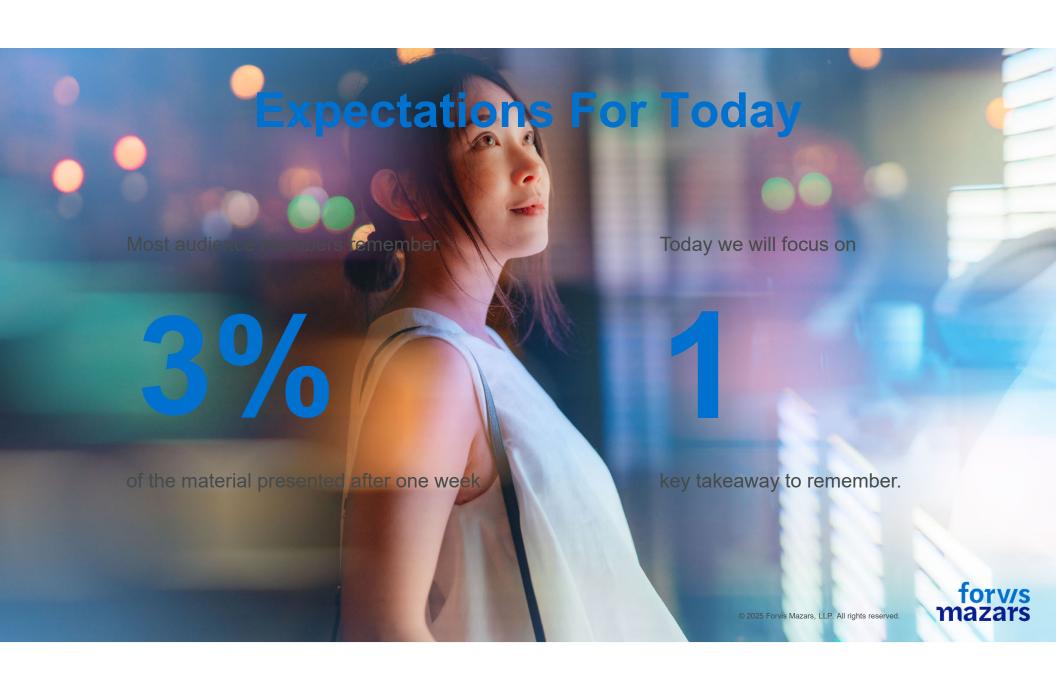
**FOCUS ON VALUE** 





Examining the abundance of technology available to enhance business operations & productivity.

Discussing practical approaches to cultivate a culture that embraces change & nurtures innovative thinking.



Why Culture Matters



## Managing Construction Tech Is Hard ...



**But Adoption Is Even Harder** 



## Tech-Driven Companies Perform Better



### **Technological Adoption**

Companies that quickly embrace & integrate new technologies see increased efficiency & productivity



**Data-Driven Decisions** 

Leveraging data analytics & Al enables informed decision making

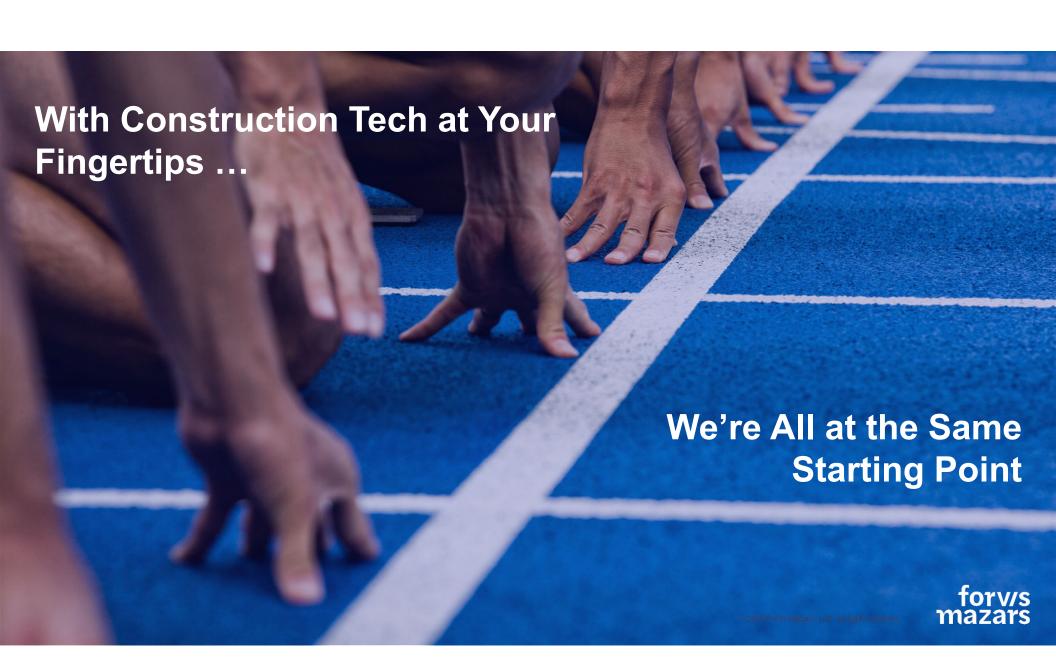


**Streamlined Operations** 

Automating repetitive tasks & workflows reduces costs & improves scalability

In today's fast-paced digital landscape, technology-driven construction companies are poised to gain a competitive edge with enhanced performance, agility, & market responsiveness.





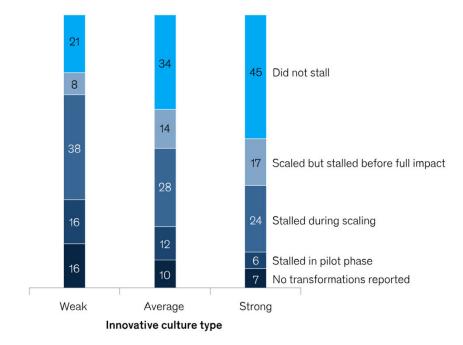


What is the key differentiator to success, since we all have access to the same tools?



# **Culture Matters Innovative Companies Outperform**

Outcome of transformations by innovation culture type, % of respondents selecting each outcome



Note: Figures may not sum to 100%, because of rounding. Source: McKinsey Global Survey on digital strategy, 2023, n = 1,086 Cultural challenges are the biggest barrier to getting results from digital investments. Risk aversion, siloed mindsets, & a general aversion to technology slow down the adoption of new tools & processes.





## Tech-Driven Culture Is the Key



**Empowers Engagement** 

**Improves Collaboration** 

**Accelerates Adoption** 

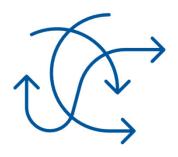
**Celebrates Success** 

**Provides Satisfying Work** 

**Fosters Innovation** 



## The Case for Leveraging Technology







#### **Inefficient Processes**

On average companies lose **20– 30%** of revenue each year due to inefficient processes<sup>1</sup>

### **Opportunity Automation**

On average workers spend **520 hours** annually on tasks that could be automated<sup>2</sup>

#### Work Overload

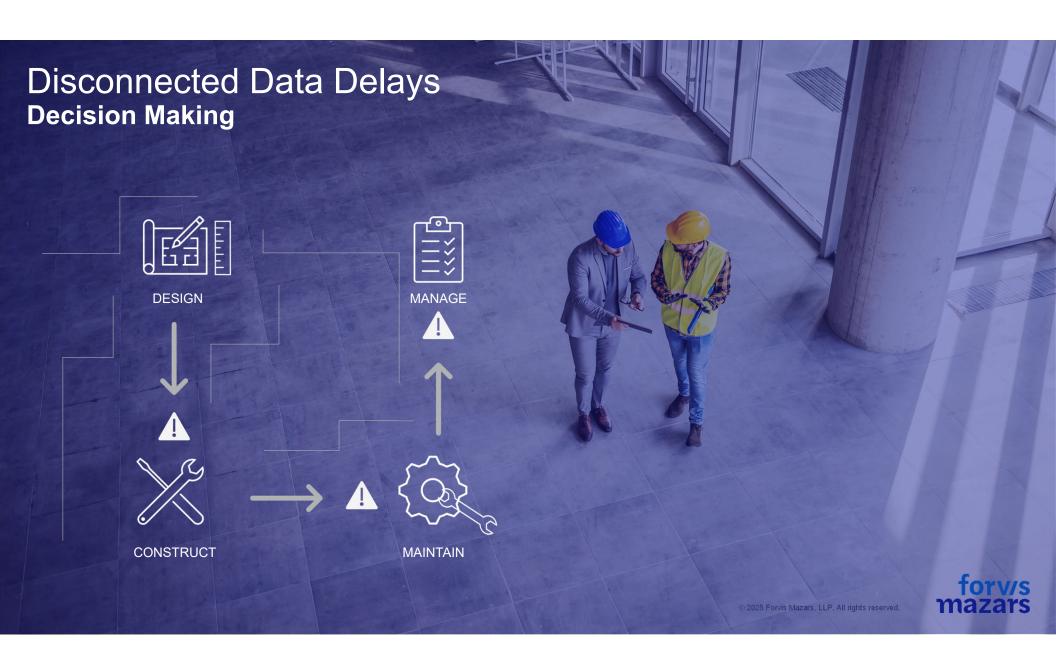
On average 68% of workers suffer from work overload in which they have too much to handle daily<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Kev Business Automation Statistics You Should Know



<sup>&</sup>lt;sup>1</sup> How Inefficient Processes Are Hurting Your Company

<sup>&</sup>lt;sup>2</sup> How Repetitive Tasks are Hurting Your Business



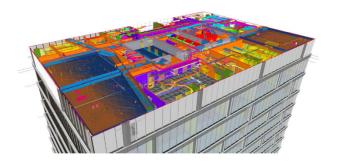
### BIM Use Case Model What's Being Built

#### Model

- Create accurate model per contract documents
- Work with design teams to reduce conflicts

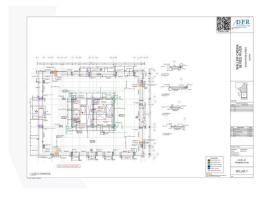
#### Coordinate

 Through BIM Coordination, help trade partners be aware of design changes & details



### **Shops**

 Create clean & simple drawings to give the field team what's necessary to build quickly & accurately





Tech Tools Are Plentiful



## **Opportunities for Automation**

**Invoice Processing** 

Sales & Use Tax

**Credit Card Expenses** 



Gain greater visibility & transparency over your business finances through insights on spend



SALT Explorer™: Empowers multistate contractors with quick & accurate project-specific sales or use tax liability estimates using the latest tax rates



Reduce the manual work of processing & allocating credit card expenses



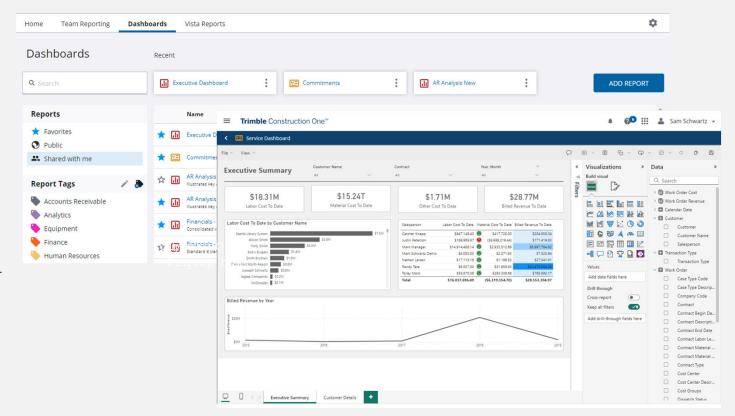
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## **Opportunities for Automation**



### Power BI

- Create custom, interactive Power BI reports
  - Device agnostic
  - Anywhere, anytime access
  - Expanding beyond ERP data lake
- Permissions & access can be provided – sensitive to user roles





## **Opportunities for Gen Al**

#### **Contract Review**

## Intelligent Meeting Recaps

## Productivity & Progress Tracking

## Safety & Risk Management



Combines the power of artificial intelligence (AI) & your own expertise to help target & manage risk in the contract review process



Extract key information & create actionable items from notes captured



Trained to identify construction objects, workers, equipment, & movement patterns; the software identifies current jobsite activity to enhance productivity



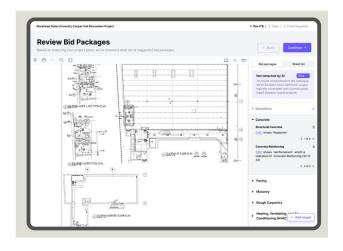
Develop safety plans, identify potential hazards, & recommend safety measures



## Gen AI for Estimating

### Plans to Bid Packages

- Down to Bid
  - Extract bid-ready details from construction documents & automatically creates bid packages
- Togal.Al & Workpack
  - A complete takeoff software solution with AI-powered tools that help you quickly detect, measure, count, compare, & label project spaces & features



### **Quantity Takeoff**











# Opportunities for Robotics & Autonomous Operations



In-Field Robotics

Robots that handle a particular portion of the work, supported & assisted by field labor



**Fabrication** 

Robotic welding & fabrication
– autonomous functions
with Al



Autonomous Equipment

Heavy equipment now offers autonomous operation to support project delivery



Onsite Robotics With Al Support

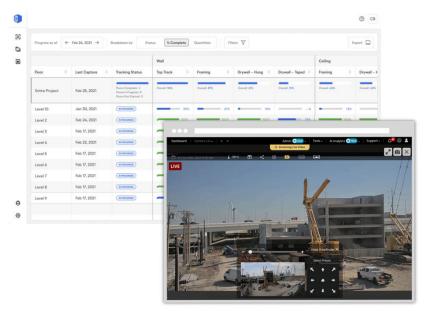
Drones & other onsite robots are now being used onsite with AI support for a variety of functions

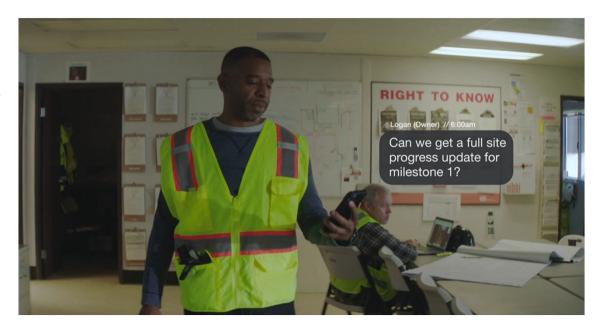


### Gen Al for Jobsite Review

#### A Visual Record

- OpenSpace.ai
  - Analysis of millions of job site images to determine how a project is progressing
  - It then presents its findings visually in the form of a heatmap overlay on a site plan to show how a room or building is changing as it comes together





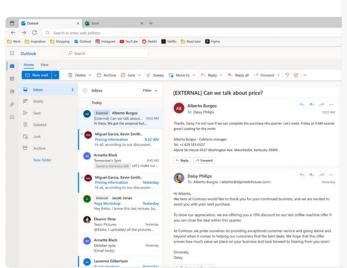
Click to play video



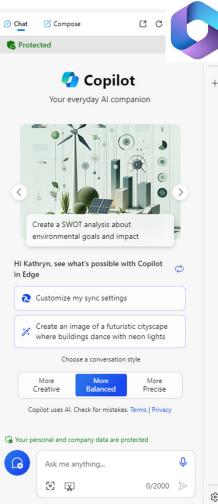
### Gen Al in Microsoft 365

### Microsoft Copilot

- Copilot in Word
  - · Write, edit, summarize, & create content in Word
- Copilot in PowerPoint
- Transform existing written documents into decks complete with speaker notes & sources
- Copilot in Excel
- · Query your data set in natural language, not just formulas
- Reveal correlations, propose what-if scenarios, & suggest new formulas based on your questions
- · Generate models based on questions
- Identify trends, create visualizations, or ask for recommendations
- Copilot in Teams
- Recap conversations, organize key discussion points, & summarize key actions









Culture Is the Key



## Count me in!

Now, how do I **choose** the right solutions for me & adopt them in a way that delivers **value**?



# Investment Considerations Making Technology Work for You



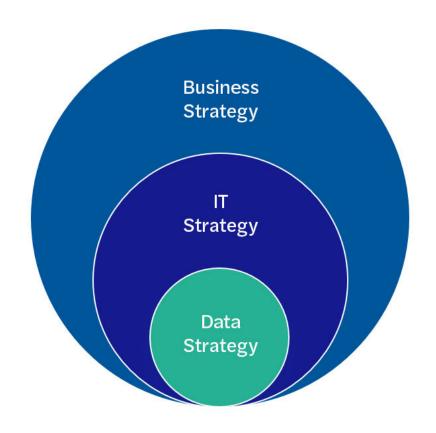
**Business Strategy**: Guides the direction & actions of a company to support sustainable growth & success in the market



**IT Strategy**: Guides the integration of technology & IT resources with broader company strategy to enhance productivity, competitiveness, & efficiency



**Data Strategy**: Guides how data will be collected, stored, governed, & used, enabling data to support decision making & drive value across the organization







"Our current strategy I would describe as whack-a-mole. Teams or departments come in with requests & we drop down money to try to address the issue & then we move on to the next hot-button item with no follow-up from issue to issue."

— Houston GC Executive



# Selecting the Right Tech Is Key to Engagement & Adoption

Align Technology With Business Objectives



2 Identify & Address Performance Constraints
Across the Organization



Check that technology initiatives directly support & enhance **key drivers of organizational success** 

Assess & address any **limiting factors** that currently impact optimal business performance

By aligning technology investments with business success drivers & reducing limiting factors, construction firms bring investments that add value to the organization.



# Align Technology Investments With Business Goals Summary



## Understand Your Business Strategy & Priorities

Clearly define your construction company's overarching business goals, objectives, & challenges to ensure technology investments directly support them



### Conduct a Technology Needs Assessment

Review your current technology landscape, identify gaps, & determine the specific capabilities required to achieve your business goals



#### **Prioritize Technology Investments**

Evaluate & prioritize technology initiatives based on their ability to deliver the greatest impact on enhancing success drivers & reducing limiting factors—all of which can drive business value



### Align KPIs & Metrics

Establish key performance indicators (KPIs) & measurable success criteria to track the effectiveness of your technology investments & their alignment with business goals

By closely aligning your technology investments with your construction company's overall business strategy & priorities, you can help your technology initiatives deliver value & impact to your organization.



## **Client Success**



"By focusing on technology initiatives that elevate our business success drivers & reduce our limiting factors, we have been able to adopt solutions that really add value to our business ..."

--- CFO | National Concrete Company

"For us, innovation is about helping people—our employees, partners, & clients—make progress in their lives by unlocking their potential to do purposeful & fulfilling work."

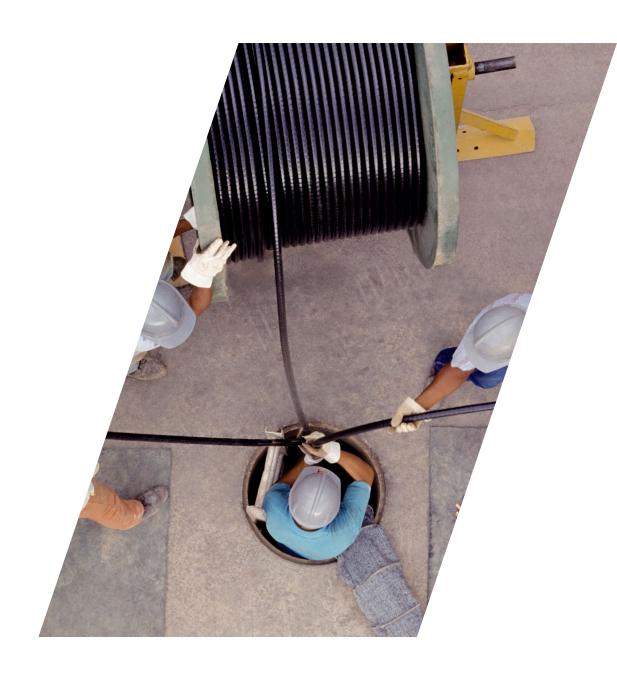
--- VP | Global Construction Company

"We created a solution that will revolutionize the installation of renewable energy facilities worldwide by providing a safer, faster, repeatable, & more cost-effective means of deploying solar installations in remote locations."

— Senior VP | Large Employee-Owned Electrical Contractor

04

Strategies That Foster Innovation

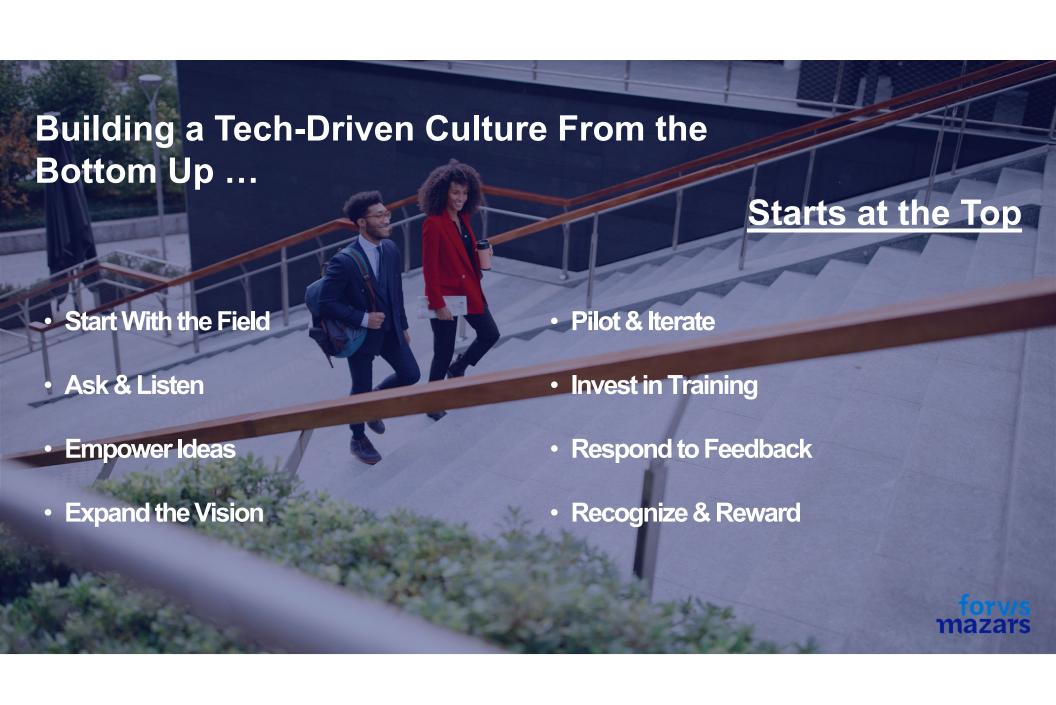


## Get Out of the Office & Into the Field

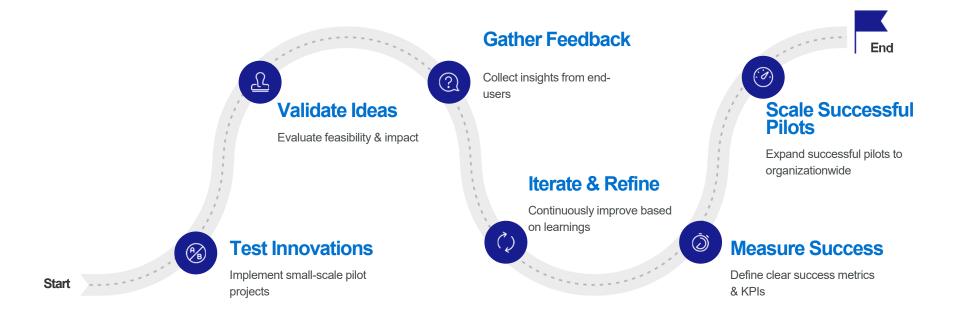
- Experience Job Sites: Visit job sites to gain a deeper understanding of operations
- Onsite = Insight: Uncover inefficiencies; onsite visits reveal inefficiencies & opportunities to streamline processes
- Listen to understand: Educate & engage





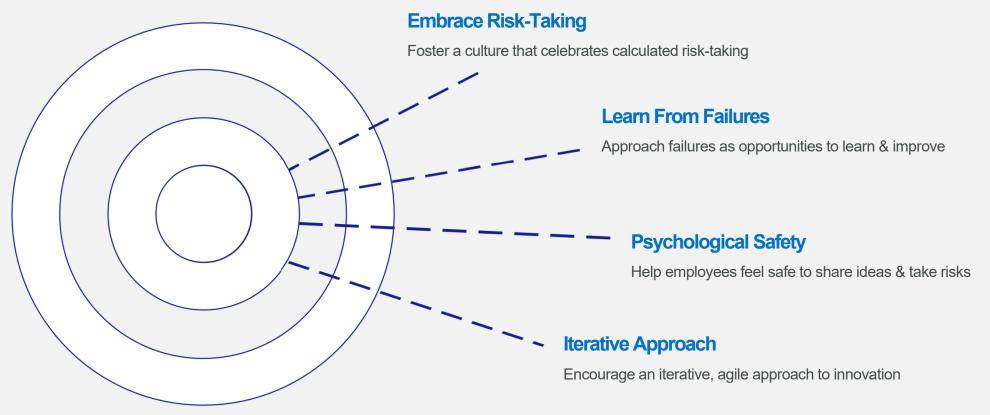


### Best Practice: Leverage Pilot Programs

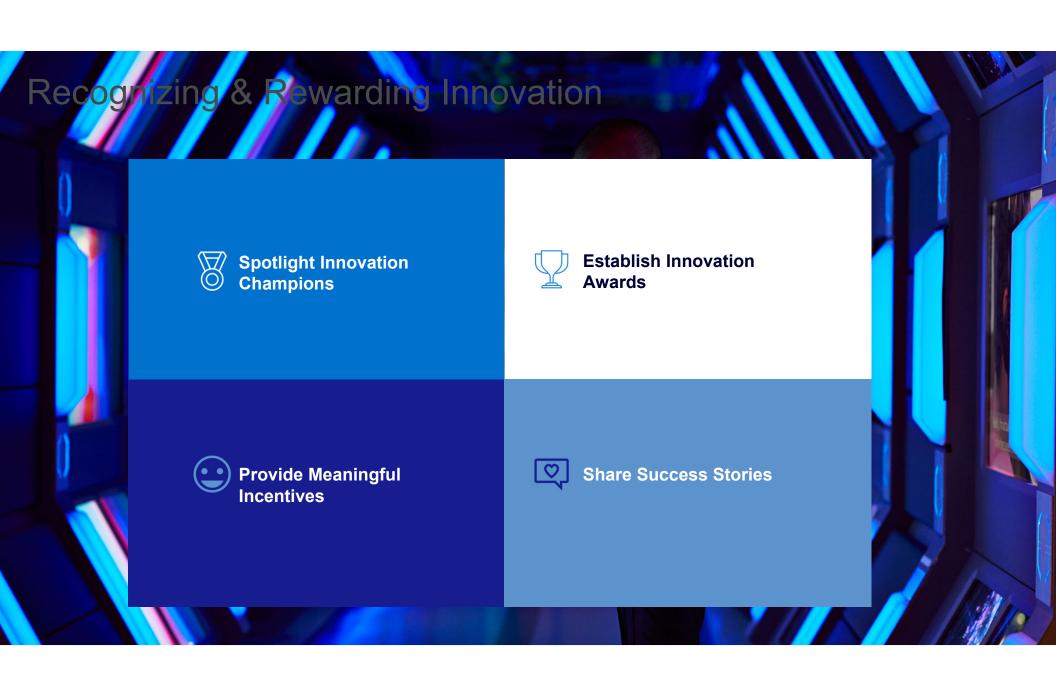




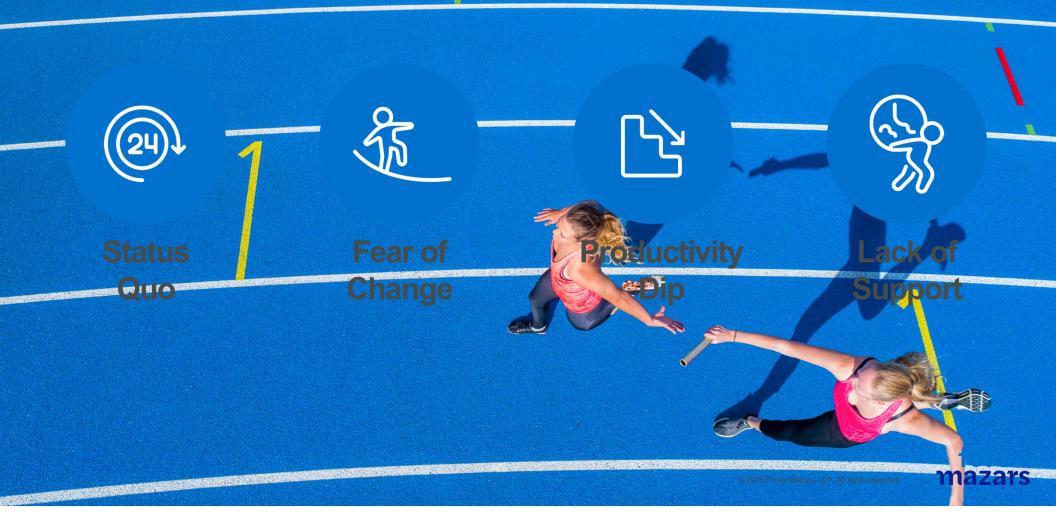
### **Encouraging Innovation & Experimentation**







## Four Common Hurdles in Tech Adoption



### Challenge 1: Status Quo



#### **Comfort With Familiar Processes**

Employees are accustomed to the existing systems & workflows, creating a sense of security & resistance to change. First thoughts: "What's in it for me?" or "I designed this process."



#### **Perceived Risks of New Technology**

Concerns about the reliability, compatibility, & learning curve associated with adopting new technology. What's the impact to my job & my time?



#### **Lack of Perceived Benefits**

Employees may not see the immediate value or advantages of the new technology, leading to a reluctance to embrace it. New tools could highlight ineffective workflows & integration issues with existing systems.

Overcoming the status quo mentality requires effective communication, sharing the "why," highlighting the benefits, & providing a clear roadmap for the transition to the new technology.



### **Challenge 2: Fear of Change**



#### **Resistance to Disruption**

Employees may be reluctant to adopt new technologies that disrupt their established workflows & routines.



#### **Lack of Tech-Savviness**

Some employees may lack confidence in their ability to learn & use new technologies, leading to hesitation.



### Uncertainty About Benefits

Employees may not see the clear benefits of the new technology, making them skeptical about the change.



### Concerns About Job Security

Employees may worry that the new technology will make their roles obsolete, leading to fear & resistance.

Overcoming fear of change requires effective listening, top-down communication, sharing the "why," highlighting organization benefits, & addressing uncertainty with the new tech.



### **Challenge 3: Lack of Support**



#### **Inadequate Training**

Employees lack the necessary skills & knowledge to effectively use new technologies, leading to frustration & resistance.



#### **Insufficient Resources**

Lack of access to support materials, technical documentation, & troubleshooting assistance during the transition.



#### **Lack of Guidance**

Insufficient leadership, communication, & clear direction on the benefits & expectations of the technology adoption process.

Overcoming the "lack of support" cultural hurdle requires organizations to prioritize comprehensive training, additional resources, & clear guidance to employees throughout the transition process.



### **Challenge 4: Productivity Dip**



#### **Temporary Decline in Productivity**

During the transition period, employees may experience a temporary dip in productivity as they adapt to new technologies & processes.



#### **Concerns About Business Impact**

The temporary productivity dip can lead to concerns about the overall impact on business performance & profitability.



#### **Importance of Proper Planning**

Effective planning & change management strategies can help reduce the productivity dip & support a smooth transition.

Overcoming the "productivity dip" hurdle requires organizations to double down on training, review integration & workflow concerns, & continue to share the "why" of the tech investment.



# Cultivating Innovation Building an Innovation Team

**Key Benefits** 



**Increase Efficiency & Productivity** 



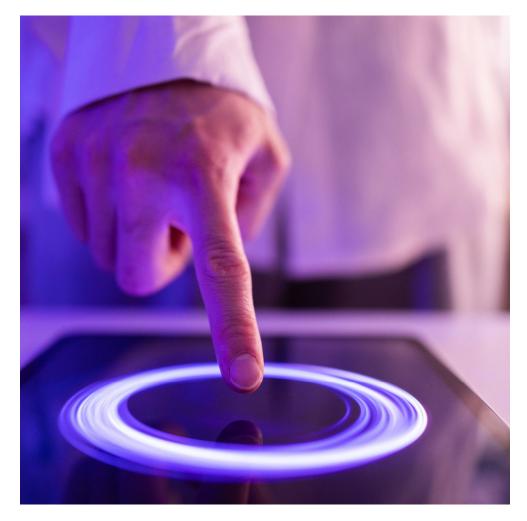
**Gain a Competitive Advantage** 



**Reduce Costs & Increase Profitability** 



**Manage Risks** 





# Cultivating Innovation Building an Innovation Team



### **Key Considerations**

**Dedicated Resources:** Allocate budget, personnel, & time for innovation

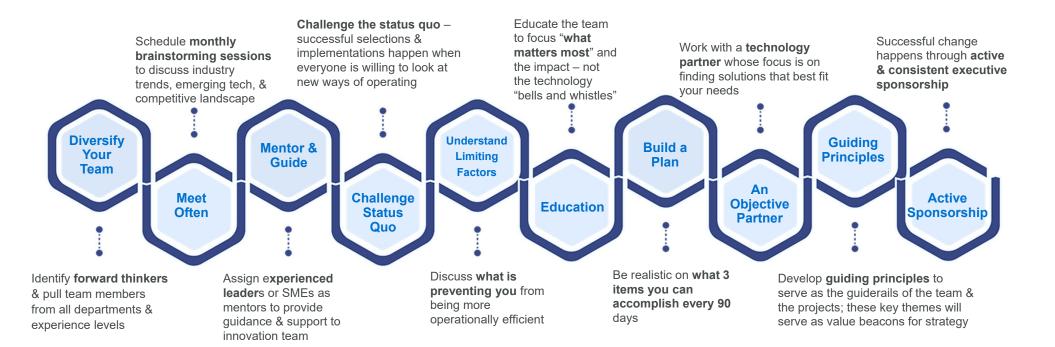
**Cross-Functional Collaboration:** Include representatives from various departments

**Focus on Practical Solutions:** Prioritize innovations that deliver tangible value

**Continuous Learning:** Encourage ongoing learning & upskilling



## Cultivating Innovation Innovation Team Best Practices





# Key Takeaways Building a Tech-Driven Culture

## Why Culture Matters

- Culture is the foundation for successful tech adoption
- A strong culture drives employee engagement, fueling innovation & performance
- Culture influences how teams respond to change

## 2 Tech Tools Are Plentiful

- There is no shortage of technology: automation, integrations, & platforms are already available at your fingertips
- The key is aligning tools with business & user goals
- Without the right culture, even the "best" tools will fail to deliver

### 3 Culture Is the Key

- Culture is the differentiator between companies that adopt tech successfully & those that fail
- A tech-driven culture needs leadership, clear communication, & constant reinforcement to excel
- Building a culture of innovation creates space for experimentation, feedback, & learning

## Strategies That Foster Innovation

- Establish an internal innovation team to champion new ideas
- Launch a pilot program to capture valuable feedback & necessary changes
- Leverage feedback to engage audiences & tailor strategies to your business needs



### Q&A



Construction Technology Services

**Questions?** 



### Contact

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