



# Using Computer-Based Technology to Help Facilitate Safety Performance

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- Importance of Measuring Safety Performance
- Technology Advancements for Workplace Safety
- Panel Discussion - Real World Technology Applications
- Key Takeaways and Questions



# Important Note

- McGriff is not promoting specific technology vendors.
- Our intent for this webinar is to:
  - Highlight general functions and client use cases
  - Demonstrate how computer-based technologies enable precise, real-time safety measurement
  - Show how companies are leveraging these technologies to enhance employee safety



# Importance of Measuring Safety Performance



# Introduction

- Measuring safety performance applies to all businesses and industries
- Includes various lines of insurance coverage to prevent claims such as:
  - Workers' Compensation
  - General Liability
  - Auto Liability
  - Property Liability
- Helps organizations move from reactive safety to proactive/real-time safety.



# Benefits for Safety

- Enhanced hazard detection and prevention
- Improved training and awareness
- Efficient monitoring and response
- Better record-keeping and accountability
- Increased efficiency and productivity
- Provides insights into individual and team contributions
- Identifies areas for improvement in support of organizational goals



# What gets measured gets done.

Peter Drucker, Management Consultant, Educator, and Author

# Technology Advancements for Workplace Safety



# Types of Computer-Based Technology in Safety

- Learning Management Systems (LMS)
- Safety Management Software (SMS)
- Mobile Applications
- IoT Sensors
- Wearable Technology
- Drones
- Artificial Intelligence (AI)



# Learning Management Systems (LMS)

Centralized platforms where educational content is delivered, learner progress is tracked, and administrative tasks are automated, making education and training more efficient and accessible.

## Key elements:

- Course creation and content management
- User enrollment and management
- Delivery of content
- Assessment and evaluation
- Tracking and reporting
- Communication and collaboration
- Certification and compliance
- Integration and automation

# Safety Management Systems (SMS)

Structured, organization-wide framework of policies, procedures and processes to manage safety risks, maintain effective and consistent safety controls, and ensure continuous improvement.

## Key elements:

- Proactive risk identification
- Consistent safety practices
- Continuous improvement
- Enhanced compliance
- Employee engagement
- Data-driven decision making

# Mobile Applications

Mobile software programs enable real-time safety performance measurement, making it easier to monitor, manage, and improve safety outcomes. They help ensure regulatory compliance and allow for swift responses to unsafe conditions.

## Common safety use:

- Training apps
- Communication and collaboration apps
- Hazard identification and risk assessment apps
- Personal safety and emergency apps
- Equipment and asset management apps
- Safety reporting and incident management apps



# IoT Sensors

Devices that monitor environmental conditions, detect potential hazards, and enable faster responses to incidents. Helps improve efficiency, effectiveness and better decision making.

IoT sensors measure:

- Temperature
- Motion
- Pressure
- Humidity
- Light
- Sound
- Chemical
- Moisture

# Wearable Technology

A range of devices worn by workers to provide real-time monitoring, instant alerts, and valuable data to prevent accidents and respond quickly to emergencies.

## Common Use:

- Ergonomics
- Real-time location tracking
- Health monitoring
- Fall detection and injury prevention
- Environmental monitoring
- Personal safety alerts
- Compliance and training

# Drones

Drones are increasingly used to enhance workplace safety by enabling safer inspections, rapid hazard detection, and efficient emergency response, thereby reducing risks and protecting workers in hazardous workplaces.

## Common use:

- Site inspections and monitoring
- Structural inspections
- Emergency response and search and rescue
- Monitoring environmental conditions
- Training and simulation
- Enforcing safety protocols

# Artificial Intelligence (AI)

AI powered systems analyze data from various sources enabling organizations to anticipate, detect, and respond proactively to safety risks for immediate correction ultimately aiming to reduce injuries and incidents.

Benefits include:

- Training and simulation
- Enhanced communication and reporting
- Resource optimization
- Predictive analytics
- Real-time monitoring
- Automated hazard detection
- Incident analysis and root cause identification



# Panel Discussion

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McGriff Clients Discuss Their Use Computer-Based Technology  
to Help Facilitate Safety Performance

# Client Panel



**1**  
**Dean Kermicle**  
United Forming, Inc.



**2**  
**Paul Duke**  
Holder Construction



**3**  
**David Gamache**  
J.R. Hobbs Co.



**4**  
**David Finn**  
Sierra Nevada Co.

# Discussion Topics

1. Safety performance measured
2. Technology platform/s used
3. Establishing accountability
4. Safety performance measurement challenges
5. Safety performance measurement successes



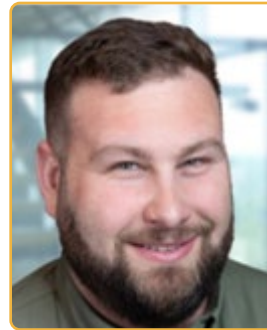
# Safety Performance Measured



**Dean Kermicle**

United Forming, Inc.

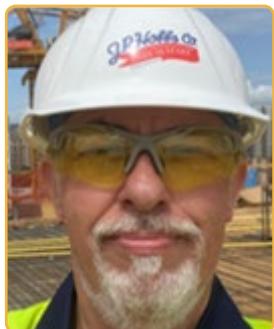
- Safety inspections
- Industrial Hygiene monitoring for silica
- Pre-task safety planning
- Hazard permitting for certain tasks
- Driver safety



**Paul Duke**

Holder Construction

- Pre-job briefing or **pre-task plan** reviews
- Safety engagement
- High risk activity observations
- Lagging indicators



**David Gamache**

J.R. Hobbs Co.

- Near miss reporting
- Safety kits delivered to worksites
- Equipment inspections
- Training
- Safety audits
- Safety pre-task checklists
- Weekly toolbox talks



**David Finn**

Sierra Nevada Co.

- Toolbox talks
- Pre-shift inspections
- Facility audits
- Gemba walks



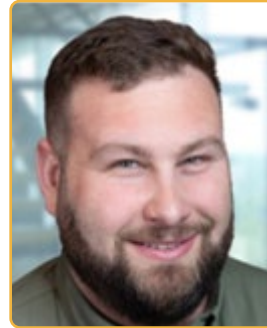
# Technology Platform/s Used



**Dean Kermicle**

United Forming, Inc.

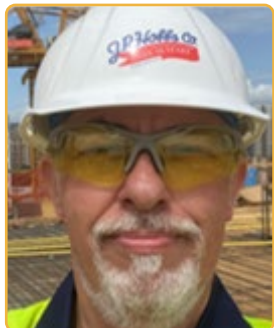
- iAuditor
- General contractor proprietary technology
- GeoTab



**Paul Duke**

Holder Construction

- HammerTech
- SmartSheets
- Power BI (business intelligence platform)



**David Gamache**

J.R. Hobbs Co.

- SmartSheet
- GeoTab



**David Finn**

Sierra Nevada Co.

- Origami

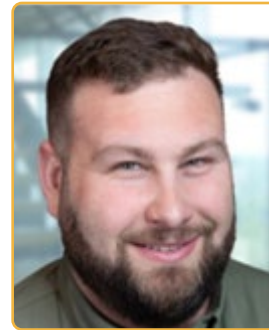
# Establishing Accountability



**Dean Kermicle**

United Forming, Inc.

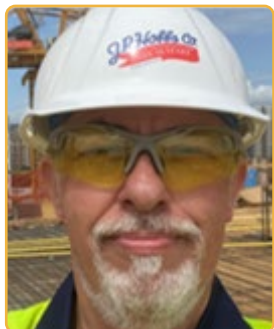
- Trend analysis from safety inspections
- Safety bonus awards



**Paul Duke**

Holder Construction

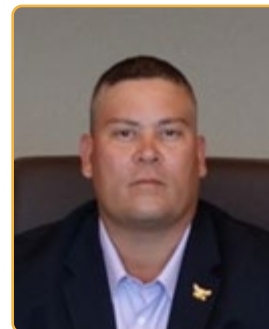
- Share safety data with leadership throughout organization
- Show observations and inspections engagement
- Regular meetings with C-suite leadership



**David Gamache**

J.R. Hobbs Co.

- Accountability related to opportunities for improvement
- Use positive reinforcement to encourage safer behaviors



**David Finn**

Sierra Nevada Co.

- Accountability and positive reinforcement help drive safety culture
- Safety is everyone's responsibility
- "Safety Champions" have a sense of pride wearing the badge

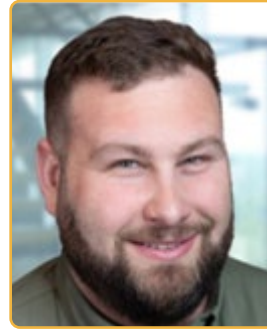
# Safety Performance Measurement Challenges



**Dean Kermicle**

United Forming, Inc.

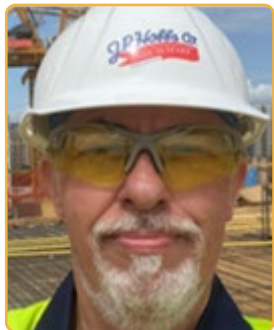
- Data only as good as what is uploaded from employees performing inspections



**Paul Duke**

Holder Construction

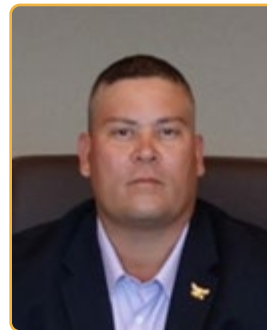
- Truly understanding what works
- Focus on what really moves the needle
- Educating participants regarding the new view of safety
- Keeping data easy to understand



**David Gamache**

J.R. Hobbs Co.

- SmartSheet glitches



**David Finn**

Sierra Nevada Co.

- Budgetary and administrative roadblocks

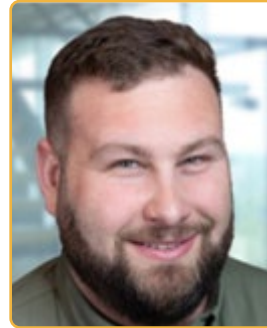
# Safety Performance Measurement Successes



**Dean Kermicle**

United Forming, Inc.

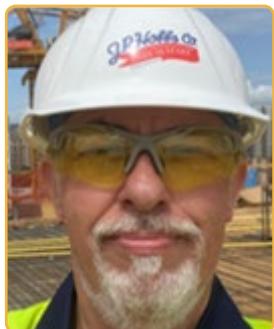
- Reduction in number of accidents
- Reduction in severity of accidents



**Paul Duke**

Holder Construction

- We are better than we have ever been
- Have visible safety engagement and leaderships
- New dashboards are usable by all



**David Gamache**

J.R. Hobbs Co.

- Regular safety performance updates to all department leaders
- Maintain training records for each employee



**David Finn**

Sierra Nevada Co.

- Reported safety concerns and near misses have increased drastically



# Key Takeaways and Questions

# Key Takeaways

- What gets measured gets done
- Modern technology enables innovative and proactive measures for safety performance
- Proven as a solid business strategy by our panel
- Drives success for employees, employers and stakeholders





# Questions



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*Vice President*

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McGriff Risk Control

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Never settle for less.

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