

# Improving Safety Through AI and the Internet of Things



**Nation Safety Net**

A Division of Nation Waste, Inc.



## A hand holding a smartphone, surrounded by a network of icons representing various IoT devices and services, illustrating the concept of the Internet of Things.

## The network of physical objects...

...embedded with electronics, software, sensors and network connectivity...

... which enables these objects to collect and exchange data.

# The Safety of the Workforce

According to the International Labor Organization, every 15 seconds, 151 workers have a work-related accident. The global number of non-fatal occupational accidents reaches a staggering number of 317 million, annually. In the United States alone, workplace injuries and illnesses cost employers more than \$250 billion annually, with 27 million working days lost per year.

Each Year:

10 workers are injured every second

Over 321,000 lives are lost on the job

More than 317 million non-fatal occupational accidents

# The Cost of an Unsafe Workplace in the USA Alone

**HOSPITAL STAY**

\$106,481,733,786

**PRODUCTIVITY LOSS**

\$201,389,141,194

**PHYSICAL THERAPY**

\$155,092,844,897

**BRAND EROSION**

\$234,953,956,009

**AMBULANCE RIDE**

\$53,240,993,046

**COSTS**

\$221,625,776,846

# Safety Results

Organizations have reported the following statistics after deploying a safety system powered by The Nation Safety Net



## Oil & Gas

Injury rate reduced by **86%** related to **Fatigue** and **Falls**

## Warehouse

**27 Proximity** alerts received in six weeks which resulted in a **100%** reduction in injuries



## Steel Manufacturer

**40 Heat Stress** incidents avoided over a 9 months which resulted in **0** injuries

## Utility

Workers and pedestrians had experienced injuries and death added a **Danger Zone** warning system which resulted in a significant reduction of incidents and **0** deaths

# Safety Using AI and IoT Improves Business Value

**Increased Safety**

**Improved Productivity**

**Better Accountability**

**More Accurate Risk Assessment**

## RESULTS



Continuously improve protection and reduce risks from predictive and cognitive analytics



Operating Efficiencies and Cost Reduction



Decreased Worker's Compensation Claims



Significant Reduction in Disruption of Workflows

# Injury Prevention Market Success

## Industrial

- Heat Stress
- Gas Exposure
- Fatigue
- Overexertion
- Man Down
- Falls
- Drop / Danger Zones
- Proximity to Dangerous Equipment

## Telecommunications & Utilities

- Electric Field
- Fatigue
- Man Down
- Falls
- Overexertion
- Drop / Danger Zones
- Proximity to Dangerous Equipment

## Distribution

- Fatigue
- Man Down
- Falls
- Overexertion
- Bad Bends
- Drop / Danger Zones
- Proximity to Dangerous Equipment

## Public Municipalities

- Heat Stress
- Fatigue
- Overexertion
- Man Down
- Falls
- Drop / Danger Zones
- Proximity to Dangerous Equipment

## Insurance

- All Injuries
- All Industries

# Thank You



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