

# Whos On. Location

**White** Paper

## Improving safety:

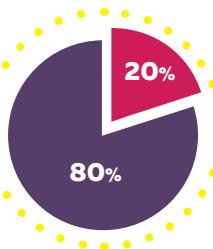
**Reduce Incidents Through  
Hazard Awareness and  
Verify the Safety of People  
When an Incident Occurs**



## Introduction

**As the safety landscape changes, organizations face new demands on an almost daily basis. The pressures to increase efficiency, deliver ROI, reduce risk and meet compliance are becoming top-level concerns.**

Similar to other industries, manufacturers are under constant pressure to hit their production targets. To keep their edge and maximize their profits, they have made operational efficiency their top priority. Yet up to 20 percent of profits are being lost to unplanned downtime. And with around 600,000 unfilled manufacturing jobs, ensuring peak efficiency and productivity is becoming mission impossible.



Due to this ultra-competitive business climate, employee safety, no matter how ugly it sounds, often gets perceived as an unnecessary expense. Saying that accidents are due to human failing is like saying falls are due to gravity. While true, it does not do much good in helping us prevent them.

***This white paper will show that employee safety doesn't cost. It pays.***

Almost every factory loses almost 5% of its productive capacity to downtime, and many lose up to 20%. The 20% that can estimate their downtime usually underestimate True Downtime Cost by 200%-300%

## The State of Safety

**Unlike wealth created by a click of a computer mouse, wealth created by production in manufacturing requires an expanded workforce. This workforce of engineers, assemblers, operators and compounders helps US to compete and out-innovate the rest of the world.**

From food and beverages to automotive and defense, the manufacturing industry plays a vital part of the US economy. It employs 12.4 million people and had an industrial output of \$1.92 trillion in Q3 2016. Although this output is still below the 2007 peak before the Great Recession of \$1.95 trillion, it is trending upward. And according to the report by the National Association of Manufacturers, every \$1 spent in manufacturing, another \$1.81 is added to the economy. This is the highest multiplier effect of any economic sector. In addition, for every worker in manufacturing, there are another four employees hired elsewhere.

**Manufacturing plants are under constant pressure to meet strict deadlines, increase output and at the same time meet constantly changing employee safety practices. Managers are confronted with the need to improve worker safety, prevent downtime, and minimize costs while being accountable for all this in real time.**

## **For most manufacturers down time is the single largest source of lost production time.**

With more than 300 work-related fatalities and 400,000 non-fatal injuries each year being reported by the US Bureau of Labor Statistics , accidents will happen and it is up to those managers, as well as business owners, to ensure the damage and danger to employees is minimized as much as possible.

**"An incident is just the tip of the iceberg, a sign of a much larger problem below the surface."**

-Don Brown

Explosions, fires, building failures and other catastrophic incidents in manufacturing industries cause worker deaths, injuries, significant economic losses and serious impacts to the environment each year. These tragic, and often catastrophic, incidents have triggered legislation and regulation to prevent and mitigate such incidents.

These incidents continue to occur as evidenced by the deaths of 15 workers and 180 injured in a refinery in 2005, & the deaths of another 14 workers in a dust explosion in a refinery in 2008.

Both incidents also resulted in hundreds of serious and incapacitating injuries, as well as economic and community losses in the hundreds of millions of dollars.

Moreover, despite legislation, there is no accurate national surveillance system for such incidents, so their number, character, causes, human, economic and environmental impacts are not well understood. Lastly, many catastrophic incidents occur for reasons that are or should be well understood, suggesting that the lessons from the past are often lost to employers and workers.

There is a need to better understand the causes of catastrophic incidents in manufacturing and to develop more effective ways to remember lessons, implement preventative measures to eliminate the occurrence of these incidents and mitigate their impacts when they do occur.

Traditional methods for evacuation management and employee attendance often rely on manual paper-based data collection and visual inspections. In case of emergency, they fall short of answering even basic questions such as:

- How many employees are in the plant right now?
- Are there any visitors or contractors on location?
- Has everybody left the incident area?
- Are all the workers accounted for?
- Who is missing and where were they last seen?
- Has anybody requested help?
- How many people were at the location at the time of the incident?

**Injuries in the manufacturing industry may be more common, as well as more serious, because manufacturing employees often work with large pieces of equipment, heavy machinery, and dangerous objects and chemicals.**

As it can be observed from the events in the Gulf of Mexico, incidents can cause significant financial damages and liability claims that can not only disrupt the day-to-day operations of the facility, but bring the whole company to the brink of failure. There is a widespread consensus in the manufacturing industry that advanced hazard awareness requires improvements across the whole organization that cannot be achieved without having access to real-time information of all workers and visitors. This basic need of being able to account for all employees at all times, especially during an incident, is becoming critical. Not only that the lack of employee attendance management can lead to ineffective risk prevention and issues with

compliance, it can lead to ineffective rescue attempts, first responders put under high risk situation and often unnecessary loss of life.

Today, a new generation of location and identification technologies are making it possible to achieve the goal of increased hazard awareness and a more effective evacuation management process. Having the ability to identify and locate employees, visitors and contractors in real-time, facility and safety managers can mitigate the risk and loss when an accident happens.



In 2006 automotive executives showed stopped production costs averaged:  
**\$22,000** per minute  
**\$1.3 Million** per hour

# Towards a zero-accident workplace

**According to the Occupational Safety and Health Administration (OSHA), 75,000 lives have been saved and millions of injuries and illnesses have been prevented since 1970 through effective occupational safety and health management systems. But you don't need a statistician to know that safety is good for business.**

WhosOnLocation is a flexible and powerful web-based employee attendance and evacuation management system. As a cloud-based system that can be accessed from almost any web browser, WhosOnLocation brings hazard awareness and employee safety to a completely new level.

Compatible with TEMPbadge expiring badges, all guests can receive a personalized expiring badge upon sign-in allowing companies real-time visibility into the exact location and identification of every individual present on the location.



## On-site attendance

- View location status of all employees, visitors and contractors
- Keep track of anyone who enters and leaves the facility
- Detect missing people and their location

## Evacuation management

- Access mustering report with visibility of all on-site personnel in real-time
- Quickly detect all those located in an incident area
- Verify the safety of those on-site
- View help requests from people affected by an incident
- Store and view evacuation reports for later audit and investigation

With no downloads and installations of any kind, WhosOnLocation removes the tradeoff between security and safety. With a portfolio of different starting plans and a flexible contract periods policy, WhosOnLocation enhances safety, gives you real-time visibility of everyone on-site, while saving you money and improving your productivity by preventing incidents through hazard awareness.

## Conclusion

**Manufacturers like any other business owner continually assessing the business benefits of incorporating new safety systems against their costs. In today's security conscious and fast-paced manufacturing industry, managing and tracking employees, as well as visitors, vendors and contractors is a key task. Due to high costs, many businesses continue to use inaccurate and paper-based systems.**

This trade off between safety costs is one of the leading causes of major incidents and, while it presents a somewhat normal business practice, it is not in any way necessary.

The facts, numbers and statistics that are presented in this white paper serve as evidence that support the cost effectiveness for deploying a structured employee, visitor, vendor and contractor presence management solution. Employee safety and evacuation management practices can be significantly improved without the need for investing in expensive and complex security solutions.

**WhosOnLocation's Presence Management System provides a comprehensive and cost-effective solution for employee and evacuation management.**

## References

1. [https://www.emaint.com/works/manufacturing\\_downtime\\_infographic](https://www.emaint.com/works/manufacturing_downtime_infographic)
2. [FRED-Manufacturing GDP real and nominal](#)
3. [National Association of Manufacturers](#)
4. [BLS Employee-reported workplace injuries and illnesses](#)
5. [Refinery explosion BP 2005](#)
6. [Imperial Sugar Company Dust Explosion and Fire](#)
7. [Deepwater Horizon Oil Spill 2010](#)