

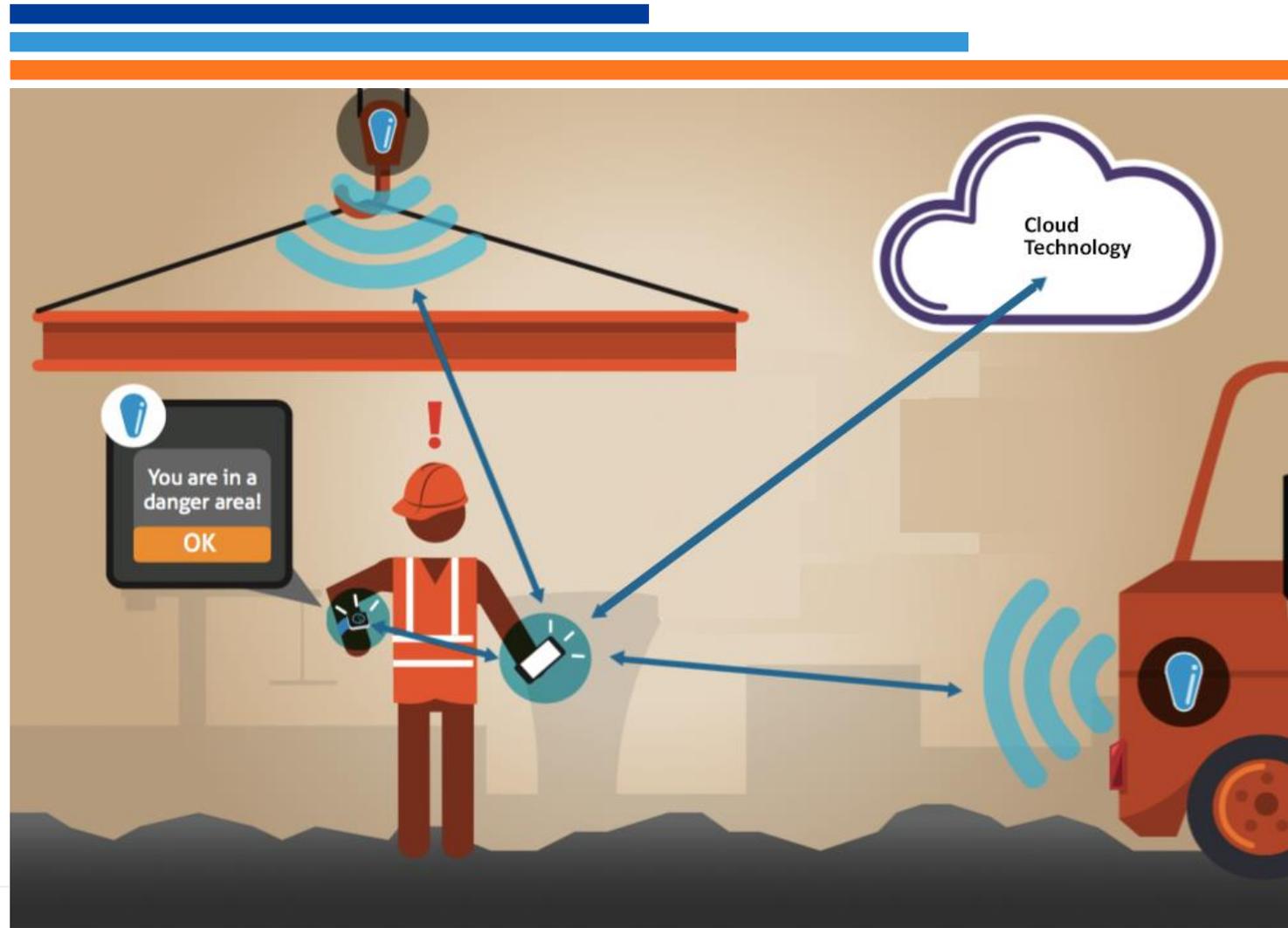
# Improving Workplace Safety With Wearable Tech And Automation

Introduction

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## Introduction

Richard Nixon formed the Occupational Safety and Health Administration in 1971 to assure that American men and women could depend on safe and healthy workplace conditions. In the decades since, OSHA has enforced high standards and provided countless hours of training. Yet, workplace hazards remain a fact of working life.

In 2013, the Economic Policy Institute reported that there were 23,000 on-the-job injuries in the U.S. each and every day, equating to [8.5 million injuries](#) over the course of a year. The huge cost of these injuries to the economy is close to \$200 billion annually. Factor in the cost of illnesses, and the price tag hits \$250 billion.

It's no wonder, then, that employers are turning to wearables and automation as an innovative means for improving safety in the workplace. This technological revolution has no fixed industry target. It encompasses everything from construction sites to industrial plants to grocery stores. There's the potential to go even further in the future.



## Wearables Prove Their Worth

Hands-free wearables have begun to flourish as employers recognize their value. Able to monitor vital signs, gauge the distance to hazardous areas and measure a worker's exposure to potentially harmful elements, wearable tech [enhances a person's awareness](#) of his or her surroundings even as it constantly improves its own analytical abilities, according to the website BrainXchange.



Image: Wearables can monitor vital signs, gauge the distance to hazardous areas and measure a worker's exposure to potentially harmful elements (source :

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Wearable technology reacts to its environment. It is always collecting data on a jobsite or examining the condition of equipment and machinery. BrainXchange reported that wearables also act as warning devices, capable of communicating safety alerts (a chemical spill or fire, for instance) to every employee in the area simultaneously.

Wearable tech like smartwatches have allowed workplace safety efforts to reach new heights of ingenuity. Safety ingenuity knows no bounds.

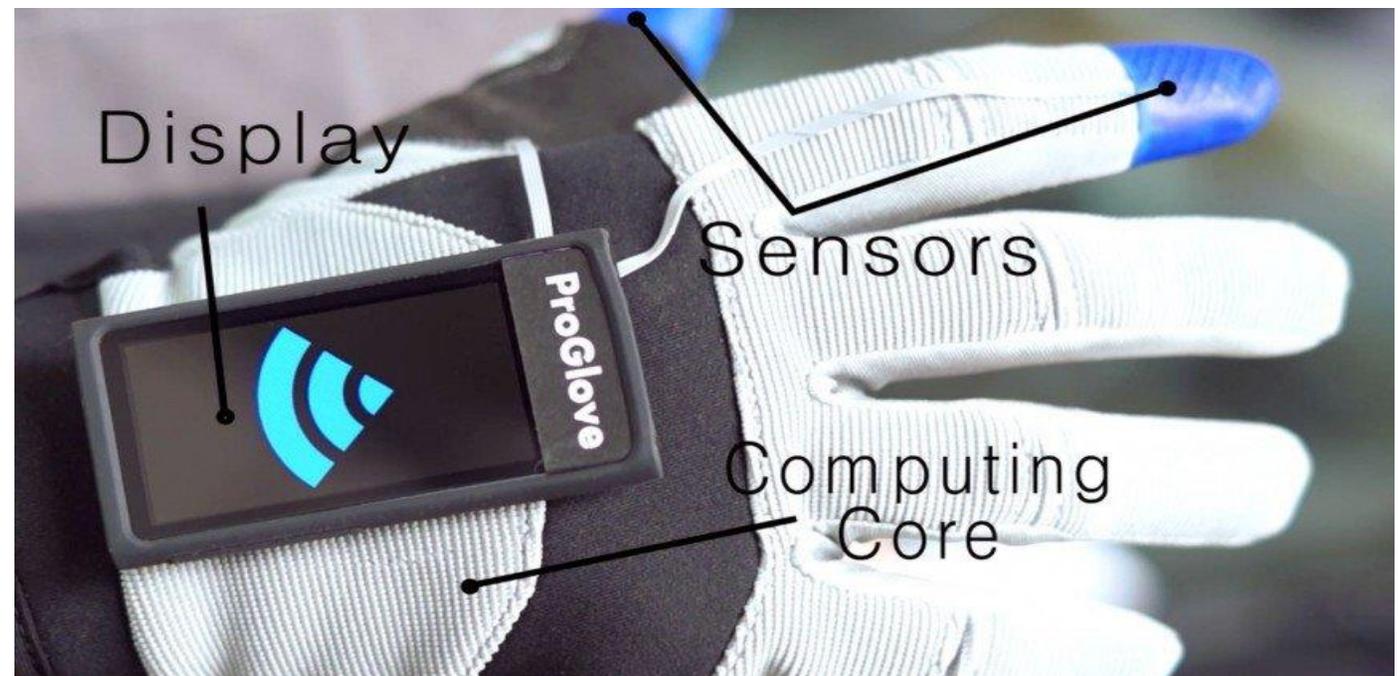


Image : Smart watches and similar platforms have been proven to boost employee productivity

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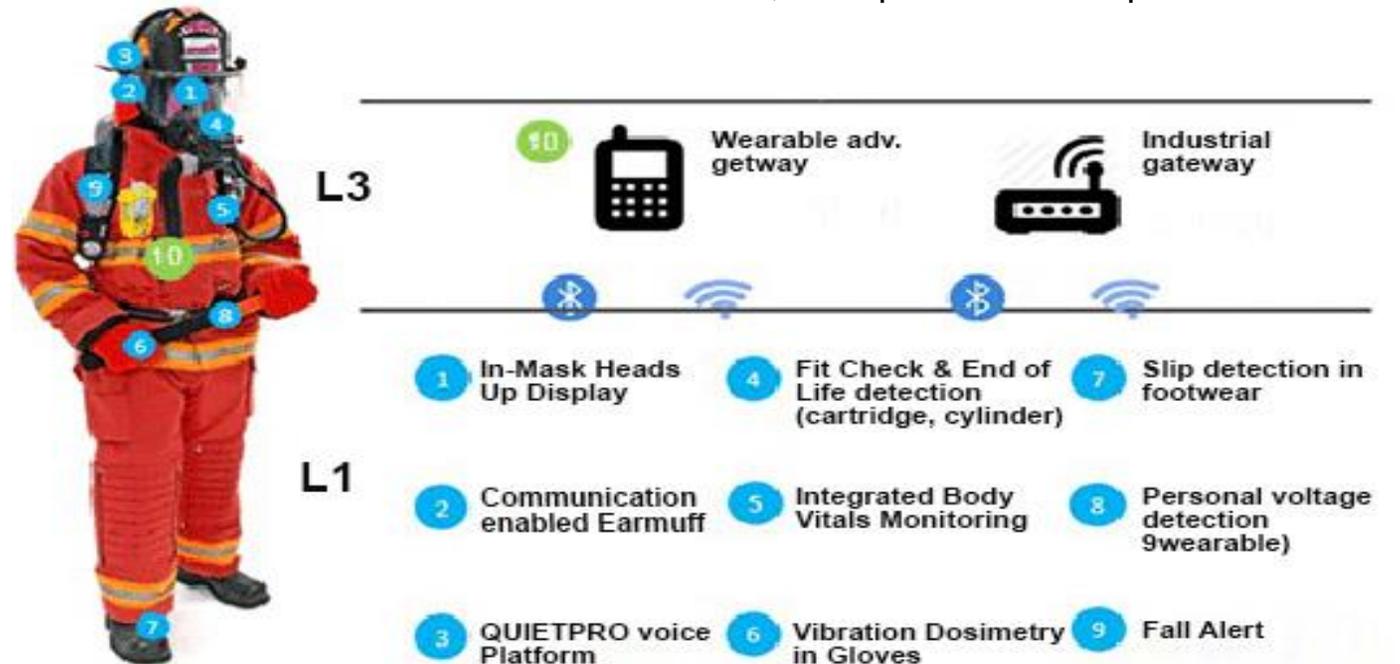
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Engineers in Australia have developed patches capable of detecting toxic gases and UV radiation, while coal mine dump truck drivers for Rio Tinto wear devices resembling baseball hats that measure brainwaves to prevent fatigue-related errors.

There's evidence that wearables do more than just keep workers from harm. [Mobility technology](#) like smart watches and similar platforms have been proven to boost employee productivity. British grocery chain Tesco, for example, has outfitted its employees with armbands that [track assignment completion time](#), order fulfillment and other relevant information, Entrepreneur.com reported.



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Wellness programs have thrived with wearables as well, giving employers data on things like heart rate and energy levels to better ensure worker health. A study published by Rackspace in 2014 showed wearables had a quantifiable effect. Employees utilizing wearables were [8.5 percent more productive](#) and 3.5 percent more satisfied at work.

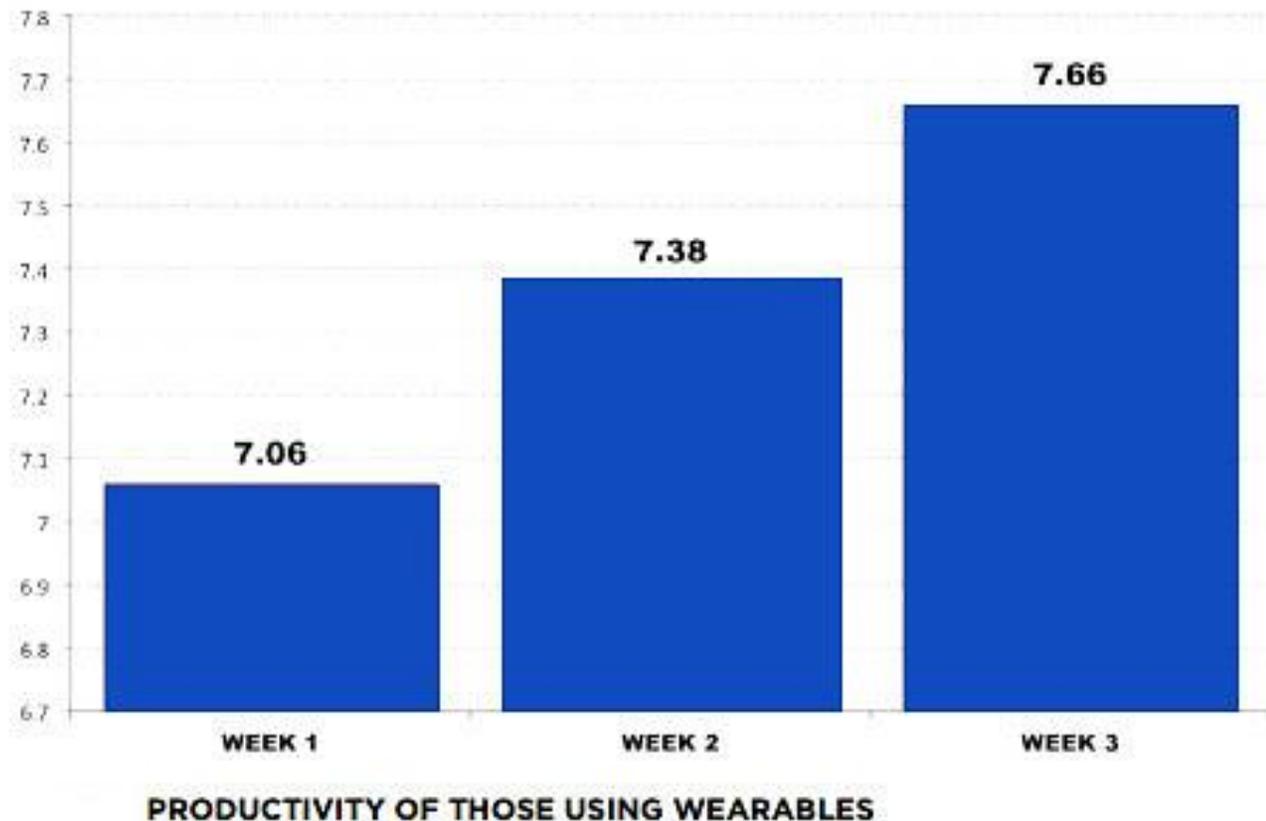


Image: Institute of Management Studies at Goldsmiths, University of London found that productivity for people using wearable technology increased 8.5 per cent

## Automation Has A Role To Play

The very idea of automation may seem a futuristic one, but it is already of booming relevance to the global marketplace, both as a tool for lucrative growth and improved workplace safety. Michael Lindley, vice president of business development and marketing at Concept Systems Inc., told Quality Magazine that automation was a [key solution to safety concerns](#).

Manufacturers have long sought a way to keep their workers and equipment safe. Automation fulfilled the need perfectly. By proactively investing in new technologies that take measurements from the field and independently and categorically sort them by asset and equipment, companies have found a way of meeting expanded client needs without sacrificing safety.

Safety isn't as often discussed as increased productivity when the technology boom's praises are sung, but it should be. Greater reliability means workers are safeguarded against equipment failures of the past. Where there used to be physical barriers separating workers from potentially dangerous equipment, now there are virtual firewalls.



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Modern automated safety technology saves time, it saves money, but most of all, it saves workers from injuries that were common, everyday occurrences just a few years ago.

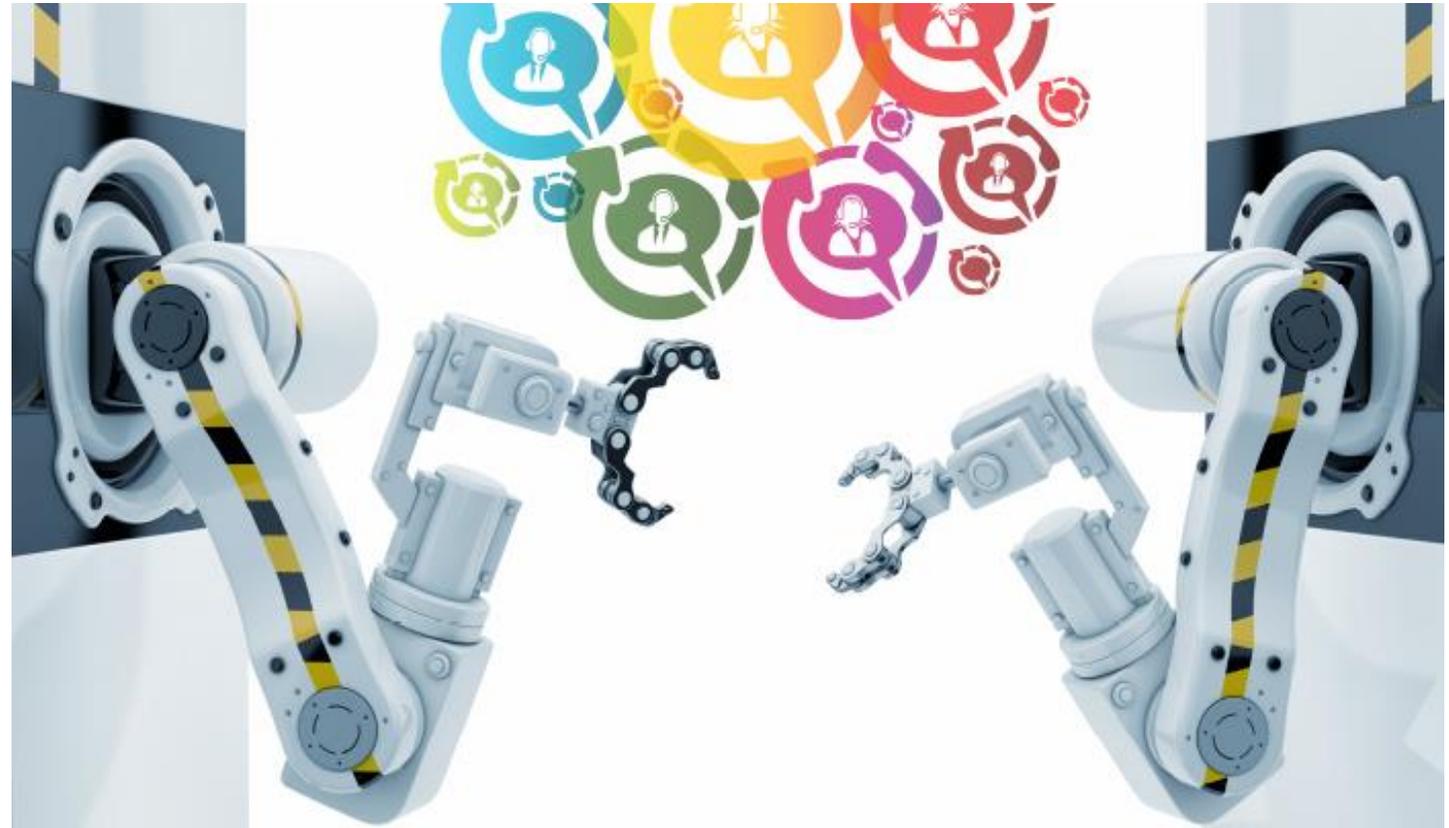


Image: Workers are safeguarded against equipment failures of the past



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Key Management Group, Inc. is a New York based Software Development, Application Maintenance and BPO Operations Company, providing quality IT solutions in Healthcare and Insurance (Property & Casualty) verticals to its clients worldwide.

Having been in the business for over two decades, we understand our client's needs and provide tailor made solutions to cater to their business in an ever-evolving digital landscape.

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## Sourcing

<http://www.epi.org/publication/workplace-injuries-illnesses-cost-250-billion/>

<https://brainxchange.events/blog/using-wearable-tech-for-workplace-safety/>

<http://www.rackspace.co.uk/sites/default/files/Human%20Cloud%20at%20Work.pdf>

<http://www.qualitymag.com/articles/93157-improving-automation>

