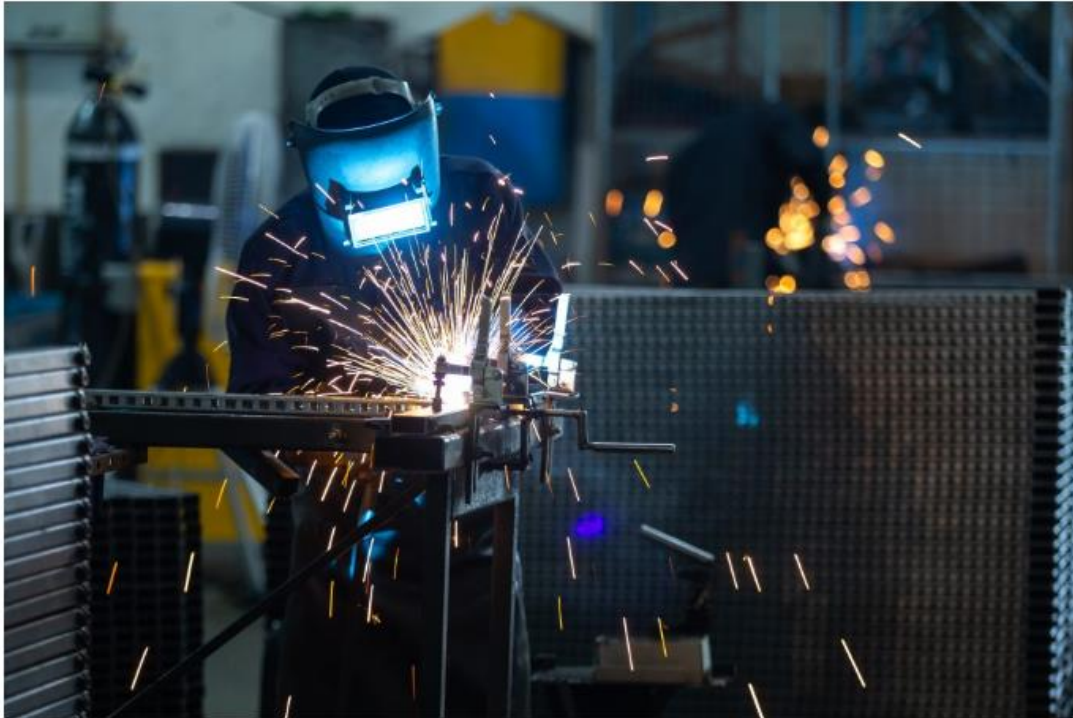# How to reduce workplace injuries with predictive data analytics

If companies can reduce incidents of injury, this will reduce incidents of employees taking time off, and compensation paid. Most companies are aware of the benefits of better worker safety. However, there aren't too many ways to improve procedures and plans any further. Construction and manufacturing companies have plateaued in workplace safety procedures. Therefore, there aren't many other options available, at least with the current business models. Businesses need to invest in new technologies, like predictive data analytics to improve worker safety even more.

What is predictive data analytics?

Predictive data analytics is a technology that predicts future trends. It is an evolution of data analytics platforms and works by taking data on past trends and using it to predict what will happen in the future. The technology offers incredible accuracy, making it a reliable tool for businesses across various industries, especially large corporations with terabytes of data stored.

We already see predictive data analytics in use – particularly, in service-based companies. Those who browse Amazon's product page will notice sections titled, "People who bought this, also bought…" to sell additional products, while platforms like Netflix recommend TV shows and movies based on what users have already viewed. Predictive analytics powers these features, and they are very useful because it allows platforms like Netflix and Amazon to upsell and cross-sell to customers, boosting sales and revenue. Due to its potential, companies across different industries are investing in predictive analytics to cut costs and boost revenue.

Can predictive data analytics be used to reduce workplace injuries?

Predict an injury before it happens

Predictive data analytics is an incredible asset for cutting down workplace injuries. The technology can collect and process information from different sources to reveal detailed insight into how injuries happen. With analytics, companies can discover the underlying causes of injury and take remedial action. But, most importantly, companies can predict an injury before it happens. Predictive analytics can analyse data on worker injuries, find the connecting factors that cause injury and then predict the possibility of an injury based on current conditions.

In other words, factories and manufacturing companies can anticipate when an injury takes place and take measures to prevent it, thus reducing injury rates.

See insights unique to each site

With predictive analytics, companies can invest in site-specific procedures to improve safety. Each factory has its own challenges when it comes to safety, which makes it difficult for companies to devise uniform safety procedures. On the other hand, it is very difficult to invent custom safety procedures because of the amount of time needed to make these procedures. However, with data analytics, factory managers can get better insight into the unique safety challenges of their respective sites. Thereby, making it easier to invent procedures that match their unique needs.

Real-time processing

Factories can devise safety procedures based on real-time data. Older safety procedures are based on static data, meaning they can get outdated very quickly. Thus, many factory workers had to entrust their safety to rules built on irrelevant data. However, with predictive analytics, factories have access to real-time data – possible because of the nature of data analytics platforms, given that these platforms can collect information from different sensors placed throughout a factory.

These sensors are constantly streaming data to the analytics platforms, which means any insights found are based on real-time findings.

Open access

Predictive analytics distinguishes itself from other formats of information. Static information like reports is restricted, which means only a few people can access the information and make full use of it. In contrast, anyone can log into an analytics system to view the data, be it a high-level executive or a safety manager. The result? Making life easier for workers across different departments to work together and reduce workplace injuries.

Key takeaways

Reducing workplace injuries is a huge benefit to manufacturing companies because fewer injuries mean less time spent away from work, no compensation to be paid and no productivity lost. Many companies who implemented predictive analytics are seeing tremendous benefits. For example, a large electrical contractor reduced worker compensation by 57% and 66%, two years in a row, while productivity increased. While a top, US-based general contractor saved $9.5 million by reducing worker injury rates. These cost savings were accomplished with predictive analytics.

This example is just one of many that depict the true power of predictive data analytics.