Construction giants, Caterpillar, use big data to mitigate the risks inherent in the industry.

Failures or mistakes in the construction industry can cost lives and, here at Springwise, we take a keen interest in innovations that aim to mitigate risk in the sector. Recently, we wrote about flexible concrete that bends under pressure rather than cracking, useful in areas of the world sensitive to earthquakes. And earlier this year, we covered scanning technology that can detect variations between architectural drawings and the actual constructions, thereby identifying errors. Now Caterpillar have developed the Driver Safety System which measures the condition and wear of equipment.

Developed by Seeing Machines, an alliance partner of Caterpillar, the innovation includes an in-cab camera and alert system which notifies the operator when a repair is due. Operators also wear smart wristbands which measure and capture information about their sleep quality and quantity. All this is then fed back and tracked by analysts with the aim of preventing accidents. “Our customers want better visibility to the interaction between operators and machines, and how behavior impacts safety and productivity,” said Tim Crane, Caterpillar Safety Services manager. “This innovative solution offers our customers the opportunity to mitigate risk and improve productivity.”

Caterpillar clearly sees a competitive advantage in helping their customers to monitor the safety of Caterpillar equipment, avoiding accidents and increasing profitability. Will other brands reap the rewards of a proactive approach to safety?

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