## The Internet of Things in the Mining Industry

The Internet of Things (IoT) refers to the multitudes of physical devices connected to the internet. These devices collect and share data with the use of processors and wireless networks. Internet of Things enables these physical devices to communicate and function without the guidance of a human.

As the population increases, the need for minerals, metals and fuels increase. Due to this increase, it requires the mining industry to produce more and faster. Within the next decade, the IoT will help with this situation. The idea behind this is that the IoT will have sensors that generate raw data. The generated data is then analysed and transferred into actions that the equipment operators will be able to distinguish.

## How can the Internet of Things help the mining industry?

- 1. IoT helps to regulate mining processes by building newer business models and highly agile methods.
- 2. It improves traceability and visibility by allowing users to transfer and receive data over a network with no human interaction necessary. The IoT also provides better monitoring of operations and increases efficiency that leads to identifying issues involving performance a lot easier.
- 3. Mining using the IoT ensures the safety of people working in mines and the equipment that they use. Sensors on the equipment are used to optimise and coordinate the mine's layout while indicating how the equipment operates and what mine paths are being used. Using these sensors increase the opportunity to ensure safety and efficiency.
- 4. Having equipment and vehicles linked to networks makes it easier to collect data and collects a significant amount of it. This data can improve accuracy rates and allows mining companies to find the latest trends to stand a chance in the competitive market. The sensors also help to detect any equipment failures to address any issues before they occur.

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