

Miners of the Future - Ensuring good working conditions in the future digital mine

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ABSTRACT

The emerging digitalization in the mining industry offers new possibilities for improved work environment, but it is a process that requires caution and reflection. Used correctly, digitalization can create attractive jobs in safe control room environments, providing space for the employee's full expertise and creativity. Such control rooms receive online processed information from the "rock", from personnel and from machinery, and control room equipment makes it possible to control and fine-tune the complete operation, from resource characterisation to the final product. Sensors and the extensive use of cameras and image techniques even permit "live performances" in the control room. All of this is certainly a good development, but we must also consider the risks, such as privacy issues, increased stress and changed work-life boundaries.

Therefore, we need to ask ourselves a number of questions: Will jobs disappear? What are the effects on competence and skill requirements? How is the physical and psychosocial work environment affected? Will digitalization open up for a new gender order? What is the human's role in a more digitalized production system? What will happen to trade unions and other power systems? These questions can be condensed into a broader issue that more clearly highlight the width and the dynamics of the development: *How can we ensure good work in the future digital mine?*

The presentation is based on experiences from Swedish mining industry and the European Union project *Sustainable Intelligent Mining Systems (SIMS)*