

"IoT technologies allow us to intelligently connect people, things and businesses in order to run better."

Dr. Danie Smit

- Business Architect, Energy & Natural Resources SAP Africa
- Mining Task Group Chair, Industrial Internet Consortium

# Industrial Internet of Things (IIoT) in the Mining Industry



### **IIoT in Mining**

Emerging technologies are changing the way centuries-old industries operate. In the mining domain, adding sensors and internet connectivity to vehicles, machinery and people is increasing mine safety, enhancing productivity, and improving our use of global natural resources.

## **Benefits of IIoT in Mining**

- Advanced automation and operations of machines
- Ensuring worker and equipment safety & visibility
- Improving efficiency
- Decreasing operational costs
- Reducing energy expenditure

### **Evolving the Mining Industry**

The evolution of mining means opportunities for transformation across surface mining, underground mining and beyond. Advanced tracking devices, realtime data analytics and automation of standard processes bring about new ways of maintaining mine safety and improving efficiency.

### **IIoT Applications in Mining**

- Predictive maintenance
- Field analysis, anomaly detection & reporting
- Remote monitoring & control
- Continuous & autonomous operations
- Health monitoring



"Pervasive communications systems, interoperability and automation will provide critical benefits for mining companies"

- Dr. Mark Dunn
- Research Group Leader, Mining and Processing CSIRO
- Mining Task Group Chair, Industrial Internet Consortium

# Mining Task Group

#### **Ecosystem of Experts**

The Industrial Internet Consortium Mining Task Group brings together end user organizations, product vendors, service providers and research organizations to create new IIoT solutions, generate operational efficiencies and develop business model innovations.

### **Key Benefits**

- Learn, network, and form global, collaborative relationships
- Thought leadership & innovation through research, new business models and testbeds
- Influence future IIoT development
- Create market momentum



### **Mining Task Group Mission**

To help mining companies and mining equipment manufacturers to leverage IIoT to optimize business operations and find new revenue streams.

### **IIC Resources**

- <u>IIoT Frameworks</u> for designing secure and fit-for-purpose IIoT solutions.
- <u>Webinars</u> to hear from the experts in the field
- <u>Testbeds</u> to understand the art of the possible