



SYMBOTICWARE INNOVATION HIGHLIGHT



Symboticware

COMPANY OVERVIEW

Symboticware innovates in the industrial Internet of Things (IIoT), delivering data-driven insights and analytics to streamline management of fixed and mobile assets in the natural resource industry. Symboticware's off-highway vehicle management system, 4-Sight.ai, provides AI-enabled insights that allow fleet operators to reduce carbon footprint, optimize fuel consumption and enable preventive maintenance - among other benefits. Some key customers in mining include Glencore, Vale and Newmont. Symboticware is also actively expanding their reach in agriculture, forestry, oil & gas, and construction.

LOCATION: SUDBURY, ON

TECHNOLOGY



Internet of Things

A SLOW MIGRATION TOWARD INDUSTRY 4.0

Natural resource companies have been slower to migrate to Industry 4.0. Connectivity in remote operations has been expensive and rugged environments are a barrier to the deployment of centralized asset management solutions. According to a recent BCG survey, 30% of natural resource companies have yet to implement their digitization strategies. Today, natural resources companies globally produce 5B tonnes of CO2 and spend \$350B towards maintenance. The companies lagging in digitization fail to enable cost savings, better ESG performance, and greater visibility of assets.

INCREASING PRODUCTIVITY WHILE DECREASING CARBON FOOTPRINT

Symboticware's end-to-end asset management operating system, 4-Sight.ai, automatically collects raw data from field equipment, applies business intelligence, and delivers telematics data and actionable AI insights that fleet operators can leverage to improve machine health and fleet productivity. 4-Sight.ai reduces an average haul truck's annual carbon footprint by 23 tonnes. This is done by optimizing idling, braking/acceleration, reducing fuel consumption, and preventing machine failure.

VALIDATING AND SCALING 4-SIGHT.AI ON THE LTE NETWORK AT NORCAT

Coming to CENGN, Symboticware's goal was to complete the development of SymBot and 4-Sight.ai software. Symboticware's solution was functionally validated in a real-mining environment after having its devices deployed in the CENGN Smart Mining Living Lab at NORCAT and connecting the collected data to the CENGN Testbed's AWS cloud services through the mine's Nokia LTE network. During the testing, Symboticware scaled to simulate 300 streams of data coming from SymBot dataloggers. The project was a success with no data point drops.

“Our project with CENGN now allows us to market our integration and partnership with Nokia mobile technologies in underground mining operations having proven the support with our hardware and software technologies.”

Peter Cunningham

Project Manager, Symboticware



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