

# OUTSTANDING INNOVATOR

## *Dr Bob Johnson*



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Dr Bob Johnson is an Australian innovator who has spent his professional life providing vital services to the global mining industry.

As a pioneer in the use of computer software for modelling resources in the mid 1970s, he met a need to provide quick turn-around on drafting coal boreholes. He demonstrated true innovation by extending that service into a unique solution for the mining industry

with his first company Earth Science Computer Services. He founded Maptek in 1981 to develop mining software that could be operated easily by the geologists and mining engineers themselves.

His vision has seen the development of mining technology applicable to all resource types and mining techniques.

He completed a BSc (Hons) degree in Applied Geology at the University of New South Wales in 1968 and went on to complete a PhD in Applied Geology and to lecture in mathematical geology.

Johnson appreciated the financial support he received from the Joint Coal Board as a student. Maptek maintains strong links with universities, providing scholarships, sponsorship, training and equipment.

He has been a Member of the AusIMM since 1967 and a Fellow for the past 13 years. He received the AusIMM President's Award in 2014. Bob is a

Member of the American Society of Mining Engineers.

Besides founding Maptek in 1981, in 1997 he co-founded an exploration company in South Australia. Publicly listed since 2002, Havilah Resources has defined several significant resources in copper and iron ore, which it is looking to develop in copper and iron ore, and mining has commenced at Portia Gold mine.

Watch the interview with Bob Johnson at <https://www.youtube.com/watch?v=upVGyTV43r8>

In 1986, Maptek's first office overseas opened in Denver, Colorado. Eight more followed and Maptek offices can now be found in the US, UK, South Africa, Chile, Brazil, Peru and in Australia in Adelaide, Brisbane, Newcastle, Perth and Sydney.

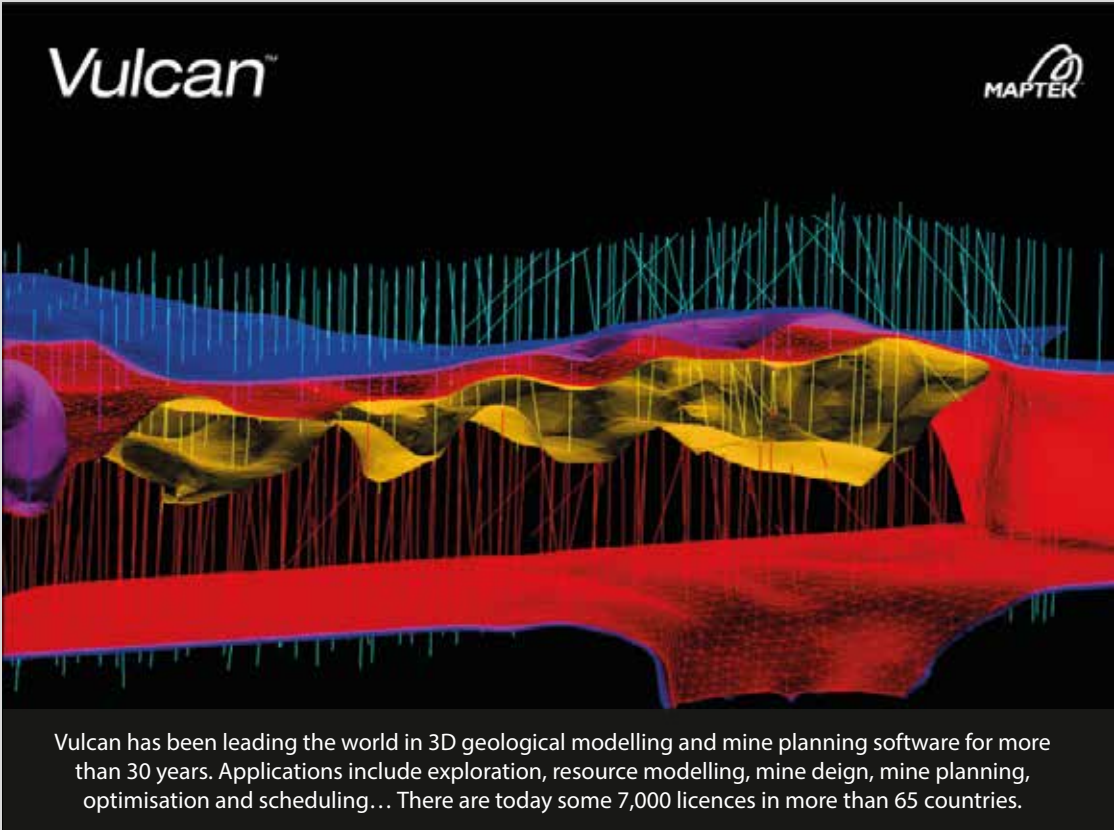
Today, Maptek provides highly regarded software and services across the mining execution value chain. These solutions provide a competitive advantage to operations by enabling them to make optimum use of their available data.

Maptek technology is built with the end user in mind. A guiding principle is that systems must be intuitive. Particular attention to graphics and 3D visualisation tools allow professional staff to use their expertise to drive informed decision making and continual productivity improvements.

Maptek Vulcan 3D geological modelling and mine planning software is installed at more than 1,700 sites worldwide. Vulcan has evolved over 33 years into a feature-rich software system providing advanced 3D spatial information, modelling, visualisation and analysis.

Maptek I-Site laser imaging hardware and software products exploited Vulcan's capability to model large volume spatial data, and the advantages of using laser imaging devices to collect survey data. I-Site 3D systems have revolutionised mine

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surveying. A built in workflow has resulted in a superior method for acquiring accurate survey data.

Other products include BlastLogic, Eureka, PerfectDig and Sentry. The latter is an integrated spatial solution for tracking and monitoring surface movement in open cut mines and civil environments.

In 2014, Johnson guided Maptek investment into new areas to benefit customers. Integration of drone-based airborne mapping with laser scan survey, design conformance and mine planning software ensures a cost-effective and safe solution for mapping and analysing change in mining, geospatial, agriculture and infrastructure applications.

Maptek maintains close and productive relationships with customers in all regions. One of the most memorable Maptek customer service stories was the rescue of the 33 miners trapped underground for 69 days in Chile in 2010.

Chilean Maptek staff conducted I-Site laser scanning surveys of the mine area and created an accurate topographic model. Vulcan was used to build a 3D representation of the mine's underground workings. Maptek geologists and engineers then helped design the direction and orientation of the three drill holes which made contact with the miners, one of which was subsequently enlarged for the rescue.

