

Delivering geospatial intelligence using remote sensing and advanced analytics



Digital Case Study Awards 2022

Energy

Australia and New Zealand



Opportunity

Horizon Power is an energy utility in Western Australia. The client serves a large geographic region across difficult or remote terrain linked by sparse or lengthy roads. Managing assets can require thousands of kilometers of travel with no prior view of the issue. Or it requires accessing environmentally or culturally sensitive areas.

Horizon partnered with Altavec, a Tech Mahindra company, for a digital solution which would provide greater visibility into their network. They were drawn to work with the provider based partly on the strength of their intellectual property and ability to deliver critical business use cases in multiple areas.

Imagining IT Differently

Altavec designed a largescale survey effort and applied analytic tools to process and visualize the resulting data. This survey covered over 5,800 kilometers of network, requiring more than 400 of infield data capture hours. The work involved:

- Leveraging LiDAR, drones, manned aircraft, and high-definition image capture to gather a complete 3D digital view of network assets.
- Their proprietary geospatial intelligence platform AIMS 3D to creating an automated, rapid access, 3D version of the network.
- Programming AI and ML tools to scan the complete model for areas of concern or opportunities for optimization.

Future Made Possible

Altavec's solution helped Horizon Power save costs and improve efficiency. The digital inspection methodology means less disruption for network customers, businesses, and communities in survey areas. It also improves on operational efficiency and crew safety, when compared to manual methods, and creates more opportunities for predictive maintenance.

This work further positions Horizon Power, and the state of Western Australia, to accelerate the uptake of renewable energy resources on their journey to net zero carbon emission by 2050.

According to ISG, this case study is an example of IT/OT integration in a digital transformation.

