MINING
CASE STUDY

Improving asset registry accuracy through laser scan facility 3D models and digital validation of asset registry and hierarchies.

60%
Cost savings vs manual registry review

3
Facilities digitally validated

Gaps
In asset register and hierarchies identified/corrected

SUMMARY

A mining company sought to improve the completeness and accuracy of its Maximo asset register across three facilities. Much of the asset information was decades old and engineering documentation was incomplete.

ReVisionz used laser scan reality captures and VEERUM visualization of 3D digital models of the facilities. These models allowed the team to compare the asset registry against physical equipment and identify missing, duplicate and incorrectly structured assets.

The approach significantly reduced the cost and time required to rebuild the asset registry while improving confidence in asset hierarchy structure and data quality.

> *"We're much more confident in our asset and location hierarchies across these areas. The improved parent-child structure gives us comprehensive coverage and reduces review time per tag."* – Supervisor

Project Snapshot

Client Industry: Mining
Practice Areas Utilized: Intelligent Asset Management (IAM)
Project Duration: ~9 months

Client Success Criteria

- Improve asset register data quality in Maximo.
- Validate asset hierarchy relationships across facilities.
- Reduce cost and schedule impacts of rebuilding the asset registry.

Challenges

- Asset information across facilities was decades old and unreliable.
- Engineering documentation required for validation was incomplete.
- Manual audits would require extensive SME time and resources.
- Hierarchy relationships and asset coverage contained gaps.

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Key Results

Improved Asset Registry Accuracy
Laser scan models and VEERUM visualization enabled comparison of the asset register against physical facilities to identify inconsistencies.

Validated Asset Hierarchies
Parent-child relationships were reviewed and corrected to align the registry with the physical layout of the facilities.

Strengthened Asset Data Foundation
The updated registry structure improved confidence in asset data and supported enterprise asset management processes.

ReVisionz' Strategy

- Utilized the laser-scan data in VEERUM to validate EAM data with 3D plant environments.
- Compared the Maximo asset registry against facility models to identify gaps.
- Worked with SMEs to validate equipment data and hierarchy relationships.
- Updated asset registry by removing duplicates, adding missing assets and aligning hierarchy structure.

Tools & Tech Used

Laser Scanning Services
VEERUM Software

Takeaways

- Software alone does not solve asset data quality challenges.
- When engineering documentation is unavailable, alternative data sources can support validation efforts.
- Digital visualization improves the speed and efficiency of asset registry reviews.
- Accurate asset registries strengthen safety, reliability and operational planning.

Complexity & Innovation

- Used laser scan 3D models to validate enterprise asset registry data quality.
- Verified asset information directly against digital facility models rather than manual plant walk-downs and engineering documentation.
- Enabled virtual facility walkthroughs to support validation with subject matter experts.

Get in Touch with One of Our Experts Today

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