BDO DIGITAL

SmartMine Predictive Analytics for Mining

Powered by BDO and Microsoft Azure

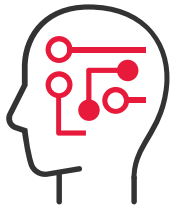
SmartMine Predictive Analytics for Mining

Define, track, and exceed your mining management goals with a tailored, data-driven approach, powered by BDO SmartMine, Azure Data Lake, Power BI, and Fabric.

BDO empowers your organization to build a **future-ready, scalable data platform** aligned with your unique organizational goals.

We look forward to helping you build next generation mining capabilities. **Faster**.

50,000+ GLOBAL CUSTOMERS



200+ DATA & AI SPECIALISTS

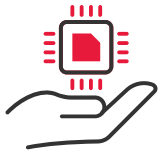
SmartMine Predictive Analytics for Mining

SmartMine contains ready-made connectors that accelerate connecting to common industry systems for mine operations, plant operations, health and safety, HR, and finance. SmartMine leverages the full power of the Azure suite of services including Fabric, Purview, and Power BI.

TYPICAL CLIENT OPPORTUNITIES

Data Accuracy and Traceability

Can you trust that your data is leading you to the right decisions and can you verify integrity?



Data Availability

Does your organization enable employees to get the data they need quickly and easily?

Manual Reporting

Reporting across multiple data sources takes time and delays decisions

Fragmented Data

Fragmented data across multiple sources obscures potential insights for opportunities

HOW BDO CAN HELP

Ingest Data From Multiple Sources - Get your data in one place and mitigate error when compiling reports

Report Automation – With all your data in one place, you can get insights from your data easily and automatically

Empowered Workforce - Furnish data to your organization, enabling self-service analytics & data driven insights

Single-Source-of-Truth - Unify your data sources and get ready to adopt new, advanced features like data science

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SmartMine Predictive Analytics for Mining Accelerator

BDO's SmartMine Predictive Analytics for Mining Accelerator will employ a structured approach to help your organization define data goals, unify data sources, get new insights, and plan for expansion.

Estimated project timeline:

We estimate this initial implementation engagement to take 4-6 weeks.

Typical pilot includes:

- SmartMine Data Lake Deployment with Pre-Built Data Models
- Connect & Ingest from Source Systems
- Power BI Dashboards & Reports
- Roadmap for Full Data Modernization & Advanced Analytics

PHASE 1
Assess and Plan

Outline the SmartMine data journey with an assessment of your organization's current data estate and goals

PHASE 2
Design and Architect

Deploy SmartMine, get new insights, and have all your data in a single-source-of-truth

PHASE 3
Data Enablement Roadmap

Roadmap to Modernize and connect your broader data landscape to SmartMine

PHASE 4
Innovate

Leverage your Data Enablement Roadmap to ideate next-generation features, like data science and AI for your organization

SmartMine Logical Architecture

Maximize Existing Investments and Build New Business Capabilities

Mining Systems

- Dispatch System
- Lab Systems
- Planning Systems
- Plant Systems
- HSE Systems
- ERP Systems

IoT Devices

- Sensors

Data Ingestion and Transport

Mining Connectors

- Modular
- PITRAM
- Jigsaw
- PI
- Deswik.Ops

Finance, HSs, Other Connectors

- Oracle
- SAP
- Hyperion
- Intelex

Intelligent Automation

- Robot-Process-Automation
- Edge Computing

Secure Data Vault

Azure Data Lake

- HSE
- Exploration
- Mine Ops
- Plant Ops
- Maintenance
- Mine Plan
- Finance and Admin
- HR
- Geology and Engineering
- Distribution

Mining Analytical Models

Azure Data Bricks

Business Intelligence

- Operational Models
- LOM Models
- Performance Models
- Financial Models

Machine Learning and AI

- Preventative Maintenance
- Bin Optimization
- Energy Optimization

Reports / Analytics

Fabric Power BI

- Board Report
- Executive Dashboards
- Value Driver Trees
- Monthly Reporting
- Daily/Weekly KPI Reporting
- Shift Detailed Reporting (incidents, drill blast, hauling, processing, etc.)
- Availability/ Utilization Reporting

Stakeholders

- Executive Team
- Department Heads
- Site GMs/ CI Lead
- Mine Managers
- Mine Engineers/ Shift Supervisors
- Analysts

Ore Grade Control and Analytics with Custom Front End for Leading Mining Firm

Industry:

- Metals Mining

Brief Company Description:

- A North American metals producer with mining, development, and exploration operations.
- 2,500+ employees across multiple sites in USA, CA, MX

Area of Focus:

- Data management
- Operations Automation
- Transformational Workload

BUSINESS CHALLENGE

- A global metals producer comprised of multiple sites, with the need to track and manage financial, compliance, and operational reporting
- The process to compile production information across the firm required high labor investment
- The firm needed a way to ensure and prove quality grading

SOLUTION

- BDO deployed SmartMine and integrated disparate data sources, building modern data platform to **centralize data and automate reporting**
- Advanced analytics were used to link **live production data** with **historical data** and presented in a **custom front end**, allowing grading teams to enhance quality control

RESULTS

- BDO SmartMine connected **12 siloed data sources** and leveraged **customized reports and dashboards** to give leadership a complete view of operations and production.
- **Report automation and custom tooling** enabled better quality control and unlocked insights into natural resource conditions
- With a modern data platform in place, this customer is now **unifying additional data workloads** that support finance, sales, and people operations.

Trust BDO as your Microsoft Partner

Strategic Alliance for your Success

Microsoft Practice by the numbers:

450+ Microsoft Certified Professionals

200+ Certified Data & AI Specialists

130+ Cloud Solution Provider Clients

$660M+ Technology Solutions Delivered in 2024

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PEOPLE

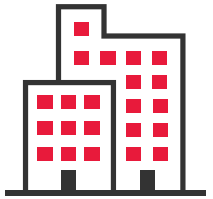
119,000+

BDO DIGITAL PROFESSIONALS

3,500+

COUNTRIES AND TERRITORIES

166



OFFICES

1,800

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