Steel manufacturer reduces costs and adds value through BI and data analytics

Client
A leading stainless-steel manufacturer

Location
US

Featured Partners
Microsoft

A global steel manufacturer faced an urgent need to improve their reporting on financial performance after divesting a portion of their business. Their existing systems were inflexible, slow, and made it difficult to access accurate data. Marlabs partnered with the company to develop and deliver a modern business intelligence solution that both met their immediate needs and added long-term strategic value.

Through close collaboration, we created a secure and scalable Power BI dashboard framework that allowed stakeholders to gain actionable insights into financial and operational performance. The solution reduced manual reporting, improved accuracy, and enabled smarter decision-making across the organization.

BI Strategy

Power BI Dashboard Development

Data Architecture & Engineering

Data Analytics & Visualization

The Challenge: Rebuilding reporting capabilities after a business divestiture

Objective: Enable real-time insights into key financial and operational performance metrics.
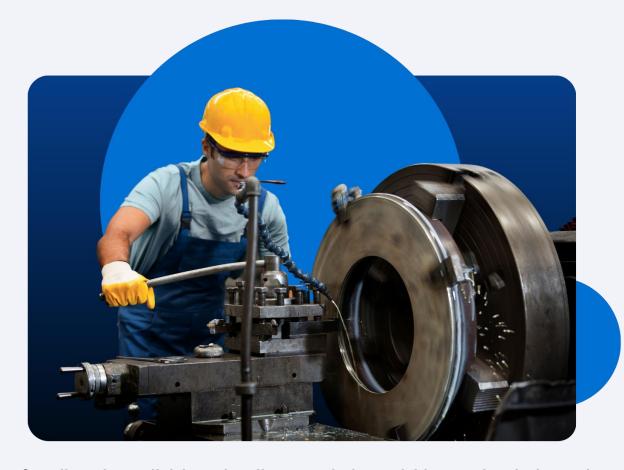
Existing Issues: Legacy systems required manual, slow reporting processes that were prone to error.

Solution Needed: A modern, scalable BI framework that could deliver accurate dashboards rapidly.

Outcome: A secure and automated Power BI dashboard system that reduced costs and added strategic value.

After divesting a division, the client needed to quickly stand up independent financial reporting systems. However, their inherited tools required extensive manual work to produce reports. Leadership lacked visibility into daily operational and financial performance, which limited agility and accountability.

The Solution: Implementing a scalable BI solution to enable smarter decisions

Marlabs developed a customized Power BI reporting platform that empowered the steel manufacturer to access clear and consistent financial insights. The solution improved operational transparency, enabled faster decision-making, and reduced reliance on outdated manual processes. Through a phased approach, Marlabs transitioned the organization to a fully independent and automated reporting model.

Phase 1: Assessment & Alignment

The team evaluated business goals, identified reporting gaps, and established success criteria with the client.

Workstreams:

- Requirements gathering
- Stakeholder interviews
- Current state analysis
- Roadmap development

Phase 2: Architecture & Integration

In this phase, we designed a modern data architecture and integrated data from multiple sources.

Workstreams:

- Data modeling
- Source system mapping
- ETL pipeline configuration
- Security and governance planning

Phase 3: Dashboards & Insights

We built intuitive, user-friendly dashboards aligned to leadership's KPIs.

Workstreams:

- Dashboard framework creation
- Visualization standardization
- KPI alignment
- End-user training

Phase 4: Optimization & Transition

To optimize future performance, the team ensured sustainability through knowledge transfer.

Workstreams:

- Performance tuning
- Documentation delivery
- Training enablement
- Governance handoff

Services and Technologies Used:

Services:

- Business Intelligence Strategy
- Power BI Dashboard Development
- Data Architecture & Engineering
- Data Analytics & Visualization

Technologies:

- Microsoft Power BI
- Azure SQL Database
- Data Gateway
- Excel

The Results: Impact on the client organization

The new Power BI dashboard system provided the steel manufacturer with accurate and real-time visibility into performance across plants, teams, and financial areas. With reduced reporting time and improved data access, leadership could make better decisions faster. The project also laid the groundwork for future data analytics maturity by building a sustainable and scalable BI framework.

Accelerated Reporting Cycles: This work reduced reporting time from days to minutes by eliminating manual processes.

Improved Data Accuracy: Automated, real-time dashboards minimized human error and inconsistencies.

Enhanced Financial Visibility: The dashboards now deliver clear insights into plant- and team-level performance metrics.

Strategic Decision-Making: We equipped leaders with the tools needed to make decisions that are proactive and data-driven.

Cost Reduction: This initiative lowered operational costs by streamlining reporting workflows and improving efficiency.

Scalable Data Infrastructure: We established a modern BI foundation capable of growing with the organization's needs.