METALS BUSINESS INTELLIGENCE
DATA-DRIVEN DECISION SUPPORT

Primetals Technologies' Metals Business Intelligence is a data-driven decision assistance solution that supports plant and production managers as well as process engineers in analyzing and visualizing production and quality data. The result: faster and better business decisions.

CHALLENGE

A business intelligence solution has to deliver insightful and actionable information without requiring a data scientist to collect, prepare and analyze complex data and process it into reports, which are suitable as a basis for smart management decisions.

To adopt business intelligence in the metals industry, it is therefore necessary to

- store a massive amount of data for a long-term period,
- to transform these data into structured information,
- and to ensure data quality.

Additionally, it is important to define relevant KPIs to be able to measure processes and performance – unified across all user groups in an organization.

SOLUTION

Primetals Technologies' Metals Business Intelligence offers a comprehensive set of tools for extensive analysis of production data packed into a powerful, flexible and easy-to-use web-based frontend. Analyses of process related data provide important insights to improve the production process and quality. With Metals Business Intelligence the technologists, process and quality engineers can undertake analyses without support of an IT or database specialist. Highly customizable ad-hoc reports and dashboards including KPIs and customizable charts provide overviews

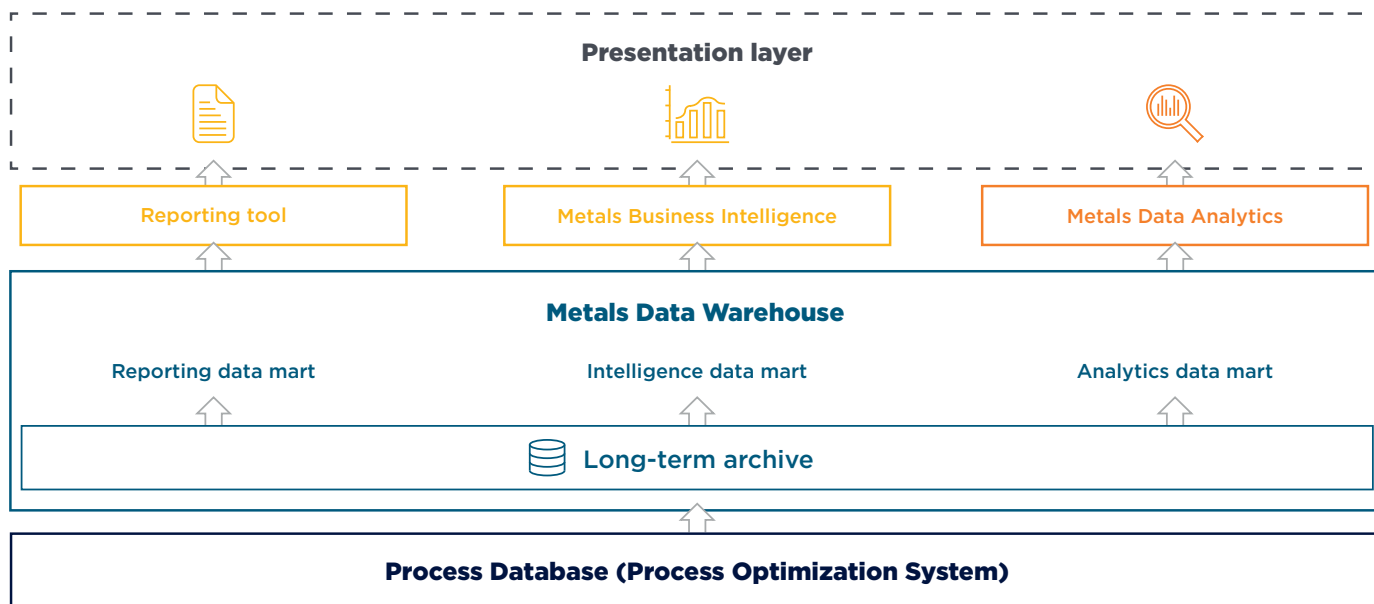of the current production situation for process engineers as well as plant management level.

The Metals Data Warehouse forms the backbone of Metals Business Intelligence as well as for other big data applications. It stores a massive amount of production data in a long-term archiving system throughout the whole lifetime of the plant.

All data are validated with respect to their quality and structured according to the requirements of the respective metals domain.

The Metals Data Warehouse provides easy access to data prepared for big data applications. Data marts are subsets and structure the data for specific business applications as reporting, business intelligence and data analytics.

Example of Metals Business Intelligence human-machine interface.

Presentation layer

Reporting tool — Metals Business Intelligence — Metals Data Analytics

Metals Data Warehouse

Reporting data mart — Intelligence data mart — Analytics data mart

Long-term archive

Process Database (Process Optimization System)

Primetals Technologies' Metals Business Intelligence makes use of Primetals Technologies' Metals Data Warehouse, which prepares data for specific applications as e.g. reporting, business intelligence and data analytics.

DEPLOYMENT OPTIONS

Metals Business Intelligence together with it's backbone Metals Data Warehouse can easily be integrated with all Primetals Technologies process optimization solutions (level 2) and is designed to run independently from the process control and optimization systems. It is installed either on a separate IT infrastructure on-premises, or can be provided in the cloud as a solution managed by Primetals Technologies.

When choosing the managed service concept, the IT infrastructure is hosted by Primetals Technologies in a cloud containing the Metals Data Warehouse with its long-term data archive and data mart layers as well as the front end for reporting and business intelligence.

The cloud solution provides worldwide availability and state-of-the-art security concepts. The data is available from anywhere, at any time, with any device. Primetals Technologies is your one-stop partner for the IT infrastructure, maintenance and licenses. The cloud infrastructure provides the convenience of the fast and straight-forward scalability and elasticity of the required IT infrastructure.

Additionally, the cloud solution is also used as a collaboration platform between Primetals Technologies and its customers to enable service and domain know-how support.

KEY FEATURES

- **Metals Data Warehouse**
  including a long-term data archive and data mart for business intelligence

- **Unified business intelligence**
  across all user groups

- **Ad-hoc report designer**
  with interactive functions such as filtering, charting and custom calculations

- **Dashboards**
  with a collection of interactive reports, charts, KPIs and controls

- **Self-service business intelligence**
  with virtual view of data sources that simplifies information visualization with data-level-security

- **Easy integrability**
  of the Intelligence Data Mart with other business intelligence tools

ENHANCED QUALITY

ENHANCED PRODUCTIVITY

INDUSTRY 4.0