

DATASHEET

Pentaho™ Business Analytics

End-to-End Data Integration and Analytics at Enterprise Scale

Pentaho Business Analytics technology enables organizations to access, prepare, and analyze all data from any source, in any environment.

The Open, Embeddable Technology of Pentaho Business Analytics

Supports flexible analytics that both leverage existing data infrastructure and future-proof deployments against tomorrow's inevitable change (see Figure 1).

By tightly coupling data integration with business analytics, this Pentaho technology brings together IT and business users to ingest, prepare, blend and analyze all data that impacts

business results. Its intuitive data integration and preparation capabilities drastically reduce the hand coding required to bring data together for insight. At the same time, Pentaho Business Analytics provides a spectrum of analytics for all user roles, from visual data analysis for business analysts to tailored dashboards for all audiences—from business executives to front line workers. Pentaho software is fast to deploy, easy to use, and purpose-built for the future of analytics.

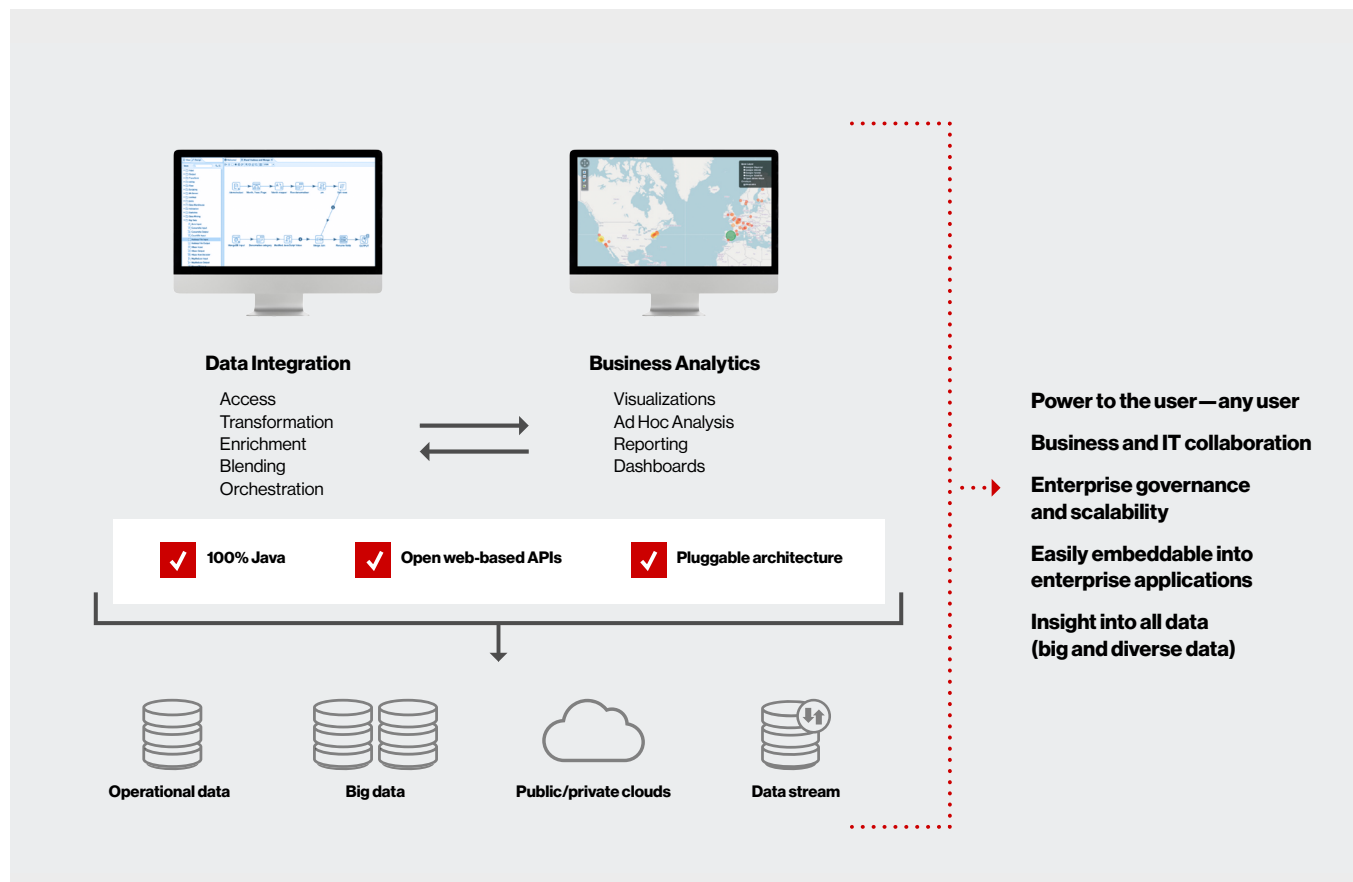


Fig. 1 Pentaho Business Analytics

- Code-free data transformation design that empowers 15 times faster productivity versus hand coding and executes Spark or Hadoop jobs in clusters for high performance.
- Operationalize with Spark stream and batch job execution, SQL on Spark connectivity, Kafka access and more.
- Seamlessly switch between execution engines such as Spark and Pentaho software's native engine to fit data volume, velocity and transformation complexity.
- Template-based approach to rapidly onboard data sources into Hadoop via metadata injection feature set.
- Adaptive big data layer that enables smooth portability of transformations across different Hadoop and Spark distributions.
- Pragmatic solutions to deliver on-demand data marts in a big data environment.

Multicloud Support

Extend the benefits of the open, extensible Pentaho technology to address a wide range of needs in multi, hybrid and private cloud deployments. Modern Pentaho data architecture simplifies management of your increasingly distributed data architecture with a single data management tool.

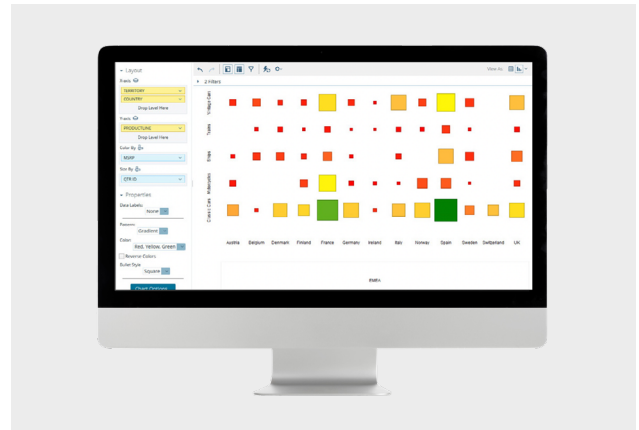


Fig. 4 Heat grid analysis in Pentaho Business Analytics

spectrum of analytics tools, users can create reports and dashboards as well as visualize and analyze data across multiple dimensions without dependence on IT or developers. Meanwhile, IT benefits from secure, scalable and governed analytics for the whole enterprise. Pentaho software can be deployed on premises or in the cloud and can be seamlessly embedded into other software applications. Pentaho Business Analytics provides:

“Using Pentaho, we are now helping clients blend a 360-degree view of all equipment data sources to enable early prediction of potential machinery failure.”

Caterpillar Marine Asset Intelligence

End-to-End Data Platform

- Connectivity to cloud storage and computing in AWS, Google Cloud and Microsoft Azure.
- Robust support, including bulk loading, for popular cloud data warehouses, like Amazon Redshift, Snowflake and Google BigQuery.
- Big data processing in Amazon EMR, Google DataProc and Azure HDInsight environments.
- Filtering and contextual analysis of streaming data in AWS Kinesis and Kafka.

Business Analytics

Pentaho Business Analytics provides a modern, highly interactive, and intuitive web-based interface for business users to discover and explore virtually any data. With a full

Ad Hoc Analysis and Visualization

- A rich library of interactive visualizations such as geographic maps, heat grids, bubble charts and more (see Figure 4).
- Extreme scale of in-memory data caching for speed-of-thought analysis on large data volumes using a drag-and-drop paradigm.
- Visual lasso filtering and zooming to understand or exclude outliers.
- Attribute highlighting for better visual contrast among data displays.
- The ability to drill down into supporting reports for detailed data.



CERN Turns to Pentaho to Optimize Operations

[Read the case study](#)

“After reviewing five different proprietary and open source platforms, Pentaho emerged as the best. I believe it is a future-proof solution that will help us to ensure data governance, ‘one version of the truth,’ and a great user experience.”

CERN, the European Organization for Nuclear Research

Flexible Dashboards

- Web-based drag-and-drop dashboard designer for business users.
- Portal and mashup integration to seamlessly embed business analytics with other web applications.
- Rich visualizations with navigation, drill-down capabilities and a library of filter controls.
- Advanced dashboard framework for 100% tailored user experiences.

Enterprise Reporting

- Full support for operational reports, parameterized reports, and interactive self-service reporting against transactional databases.
- Intuitive web-based interactive reporting for business users.
- Rich graphical pixel-perfect report designer for power users.

Embedded Analytics

Flexible, cloud-ready Pentaho technology is purpose-built for embedding into and integrating with your applications, portals and processes. Our powerful analytics and extensible architecture ensure that you can get to market quickly and delight your customers. Our embedded analytics solution offers:

- The ability to seamlessly embed real-time visualizations reports and dashboards into existing applications (See Figures 5 and 6).
- Highly customizable web-based user interface and robust web APIs that offer maximum control over the look, feel and user experience.
- Flexible capabilities for multitenant deployment as well as rich single sign-on and security integration.
- Tailored training and access to architect-level staff who have made hundreds of organizations successful.



Fig. 5 Intuitive dashboard in Pentaho Business Analytics

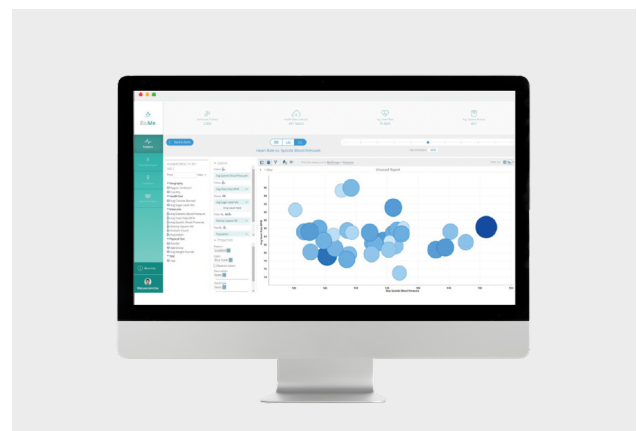


Fig. 6 Pentaho Analytics capability embedded into a web application

Any Analytics, Any Data, Simplified

Pentaho technology addresses the barriers that block organizations from getting value from all of their data. It simplifies the process of preparing and blending any data and includes a spectrum of tools to easily analyze, visualize, explore, report and predict. Open, embeddable and extensible, Pentaho software is architected to ensure that each member of your team—from developers to business users—can easily translate data into value.

ABOUT HITACHI VANTARA

Hitachi Vantara, a wholly-owned subsidiary of Hitachi Ltd., delivers the intelligent data platforms, infrastructure systems, and digital expertise that supports more than 80% of the Fortune 100. To learn how Hitachi Vantara turns businesses from data-rich to data-driven through agile digital processes, products, and experiences, visit hitachivantara.com.

[Learn More](#) →

Learn more about Pentaho Business Analytics.



Corporate Headquarters
2535 Augustine Drive
Santa Clara, CA 95054 USA
hitachivantara.com | community.hitachivantara.com

Contact Information
USA: 1-800-446-0744
Global: 1-858-547-4526
hitachivantara.com/contact

© Hitachi Vantara LLC 2023. All Rights Reserved. HITACHI and Pentaho are trademarks or registered trademarks of Hitachi, Ltd. All other trademarks, service marks and company names are properties of their respective owners.

HV-CBE-DS-Pentaho-Business-Analytics-7Jul23-C