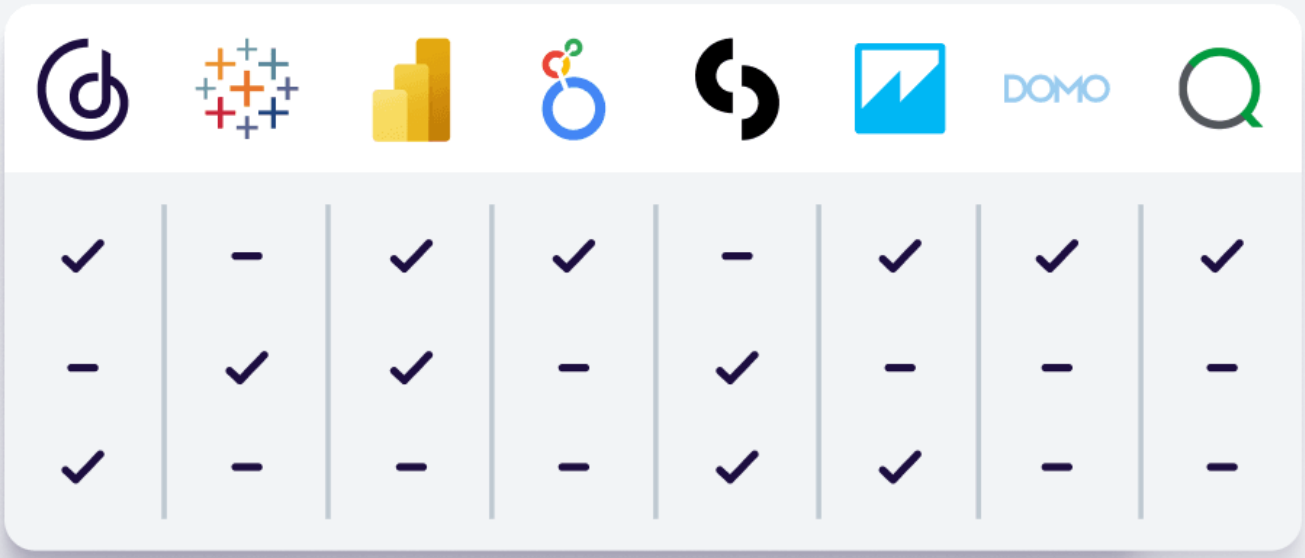
GoodData

Guide

Comparing the Best BI Tools



Data can be compared to hidden treasure. Interesting insights and outliers are buried just beneath the surface but not easily detectable by the human eye. Artificial intelligence (AI) and machine learning (ML) tools act as a treasure map to navigate uncharted data and reveal valuable information.

The modern day Business Intelligence (BI) tool combines a company's data, AI, and ML in one platform. But with a cluttered BI landscape, it can be challenging for organizations to find the right tool for their needs.

In this article, we address why these tools are so important, their capabilities, and compare some of the most popular in the market: Tableau, Power BI, Looker, Sisense, QuickSight, and GoodData.

1. What are BI tools?

Generally speaking, BI refers to the combination of strategies, technologies, and services necessary to transfer raw data into valuable insights to support decision-making processes.

A BI tool is a piece of software that helps companies manage BI-related processes, such as connecting data sources to analytics tools, creating insights and dashboards, and sharing them with relevant business team members (users and stakeholders). Such tools support companies' daily workflow and help teams to effectively react to different situations.

2. Why is it important to choose the right BI tool for your business?

Choosing the right BI tool and consolidating data in one accessible location is crucial for several reasons:

1. **Decision-making can be significantly enhanced** through the core attribute of augmented analytics. It leverages machine learning and natural language queries (NLQ) to automatically generate valuable insights, weaving them into compelling data stories and providing a wide range of interactive visualization options. This empowers decision-makers to make more informed choices.
2. **Productivity can be increased** through the streamlining of processes and workflows, supported by multiple data source connectivity and the creation of analytic models. This includes the ability to centrally manage one version of the analytics, and the capability to connect a wide range of data sources.
3. **Reusability can encourage the efficient reuse of data and reports**. Facilitated by a unified metrics store, the capacity to auto-deliver the user interface saves time and enables effortless replication of valuable insights and dashboards.

This is further supported by an “as code” architecture and seamless integration with third-party tools for extensive analytics.

4. **Future-proofing capabilities ensure** a company’s analytics solution is prepared for future data challenges, technological advancements, and further integration with third-party tools, ensuring long-term sustainability.
5. **Cost-effectiveness is also important** to keep expenses in check while maximizing the value of your data analysis. It is crucial to ensure that the BI tool ownership is motivated to continually innovate and improve the platform. Additionally, guaranteed security options and reliable customer support contribute to a comprehensive and valuable solution.

To successfully evaluate a BI tool, it’s important to determine the most important characteristics. For more information about features to look out for, check out our e-book How to Choose the Best BI Tool. This provides detailed explanations of key capabilities that can help streamline your business.

3. Comparing the best BI tools

Your choice of analytics platform directly impacts employee and/or customer happiness and, consequently, the future success of your organization (not only today but for many years to come).

To help with your initial evaluation, the tables below compare the key capabilities of the major BI and analytics tools on the market today.

Architecture

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
100% Cloud-native (Docker & Kubernetes)	✓	✗	✗	✗	✓	✗	✓	✓
Real-time analytics without feature limitations	✓	✓	✓	✓	✗	✓	✓	✓
Exposed semantic data model as a shared service	✓	✗	✓	✓	✓	✓	✓	✓
Open APIs, SDKs, and standard protocols usage	✓	✓	✓	✓	✓	✓	✓	✓

Integrating with other BI and AI/MLs, developer notebooks, and other third-party applications	✓	✗	✗	✓	✓	✓	✓	✓
All analytics definitions are declarative and they can be exported, imported, versioned, shared, and inherited.	✓	✗	✗	✗	✗	✗	✗	✗
Super-high performance, intelligent analytics cache	✓	✗	✗	✗	✗	✓	✗	✗
Integration with leading process management workflow software (or built-in feature) to drive decision intelligence	✓	✓	✓	✓	✓	✓	✓	✓
Composable & reusable metrics	✓	✓	✓	✓	✗	✗	✓	✓
Strong support for multitenancy	✓	✗	✗	✗	✓	✗	✓	✓

Dashboards

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
Easy-to-use self-service capabilities for non-technical users	✓	✓	✓	✗	✓	✓	✓	✓
Intuitive drag-&-drop UI	✓	✓	✓	✗	✗	✓	✓	✓

Embedding

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
SSO & white labeling	✓	✓	✓	✓	✓	✓	✓	✓
iFrame	✓	✓	✓	✓	✓	✓	✓	✓
Javascript library to embed and customize anything you need as React, Angular, or Vue components	✓	✗	✗	✓	✓	✓	✓	✓
Web components	✓	✗	✗	✓	✗	✗	✗	✓

Scaling and Change Management

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
Automated scaling to thousands of user groups — departments, teams, and clients	✓	✗	✗	✗	✓	✓	✓	✓
Streamlined change management to roll out changes to thousands of user groups without breaking their customizations	✓	✗	✗	✗	✓	✓	✓	✓
Possibility to change the underlying data warehouse without breaking your data model, metrics, or dashboards	✓	✗	✗	✗	✗	✗	✓	✗

AI/ML features

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
AI/ML options for all analytics user personas and skillsets	✓	✗	✓	✗	✓	✗	✓	✓
Natural Language Query (NLQ) features like search, auto-complete, and in-dashboard chat	✓	✓	✓	✗	✓	✗	✓	✓
One-click ML forecasting, clustering, and key driver analysis for non-Data Scientists	✓	✓	✓	✓	✓	✓	✓	✓
Embedded Jupyter notebook integration	✓	✗	✗	✗	✗	✗	✓	✗
Personalized insights surfaced directly from the “exploration” home page	✓	✗	✓	✗	✗	✓	✗	✓

Data Integration

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
Manual & Automated CSV upload	✓	✓	✓	✓	✓	✓	✓	✓
Use your own data warehouse (e.g., Redshift, Snowflake, BigQuery, PostgreSQL)	✓	✓	✓	✓	✓	✓	✓	✓

	GoodData	Tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
Industry-first, Analytics Lake stores analytics-ready artifacts such as metadata, semantics, and pre-aggregated metrics.	✓	✗	✓	✗	✗	✗	✗	✗

Data Security and Compliance

	GoodData	Tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
End-to-end compliance & security — from data warehouse to visualizations	✓	✗	✓	✗	✗	✓	✓	✓
SOC 2, ISO 27001:2013, CCPA, GDPR & HIPAA	✓	✓	✓	✓	✓	✓	✓	✓

Deployment Options

	GoodData	Tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
Fully hosted — managed in the cloud by the provider	✓	✓	✓	✓	✓	✓	✓	✓
Self-hosted — deploy to Amazon Web Services, MS Azure, Google Cloud, or on-premises	✓	✓	✗	✓	✓	✗	✗	✓

Pricing

	GoodData	tableau	Power BI	Looker	sisense	QuickSight	DOMO	Qlik
Easy-to-scale pricing — not priced per user (regardless of user rights), query, or session for external usage	✓	✗	✗	✗	✗	✗	✗	✗
Low entry for teams or small businesses	✓	✗	✓	✗	✓	✓	✓	✓

4. Where does GoodData stand in the BI and analytics market?

GoodData has some crucial capabilities that set it apart from the competition. The platform readily supports self-service visualization for business stakeholders, as well as integration with popular data sources and warehouses. However, its unique architecture is built to go far beyond these traditional analytics features.

Analytics as Code

A significant competitive advantage of GoodData is its "Analytics as Code" (AaC) approach. It is one of the only tools to apply software development best practices to analytics, including CI/CD, version control, robust testing, automation, and more.

Because nearly everything in the GoodData platform can be done programmatically ("as code"), it is ideal for analytics engineers and teams who want to focus on building repeatable analytical workflows and apply software engineering principles for agility and efficiency.

GoodData also uses AaC as the foundation for its AI-powered analytics. Unlike traditional drag-and-drop UI tools, the platform is uniquely positioned to incorporate Large Language Models (LLMs). LLMs can understand various programming languages and code structures, enabling them to translate natural language into structured commands.

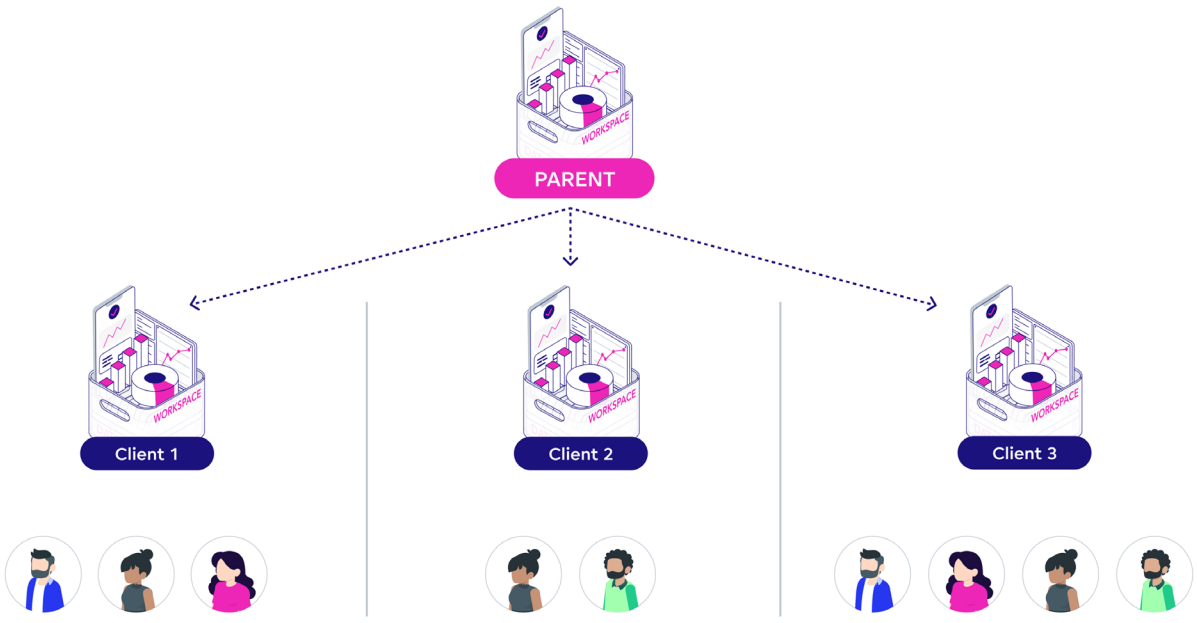
Multi-tenant analytics

GoodData provides a robust multi-tenant analytics solution built on a multi-tenant architecture. This enables the seamless scaling of unified analytics to support various user groups, including internal teams, client companies, customers, and other stakeholders.

Multitenancy streamlines the efficient and secure management of evolving data integrations, data models, and visualizations from a central control point. This ensures that data is precisely calculated and allocated to the right users when they need it, and also makes maintaining user environments incredibly simple.

In a common scenario, businesses such as wholesalers or retailers offer tailored dashboards to their customers (retailers), each with standard data. If retailers require unique information, these customizations are centrally created and pushed to individual environments. When broad changes are required, they're made once in the central "parent" template and automatically applied to the retailers' "child" content.

The uniqueness of this architecture lies in its ability to adapt to increased workloads without sacrificing performance. Adaptability is made possible through an intelligent analytics cache (FlexQuery) with infinite scalability. This innovative technology significantly reduces query times and minimizes costs by optimizing cloud data warehouse query processing (e.g., eliminating unpredictable and costly expenses).

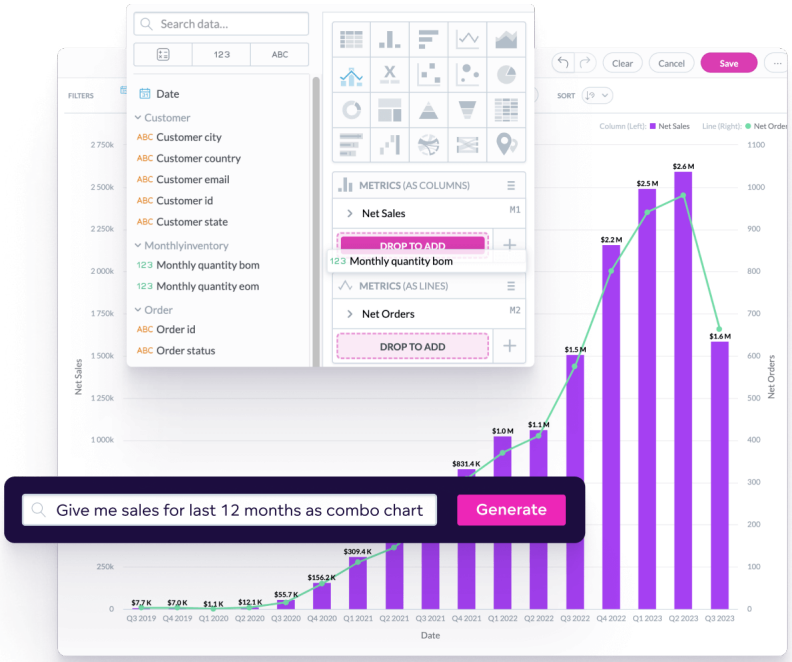


Self-service analytics

For traditional BI and analytics users, GoodData provides a low-code/no-code analytics environment. This is designed to empower individuals without coding skills to access and analyze data.

One way to achieve self-service analytics is with a semantic layer. This translates complex data into a more understandable and business-friendly format and the Multidimensional Analytical Query Language (MAQL) to write simple queries. Together with the drag-and-drop UI option, users can create new insights and dashboards as they please.

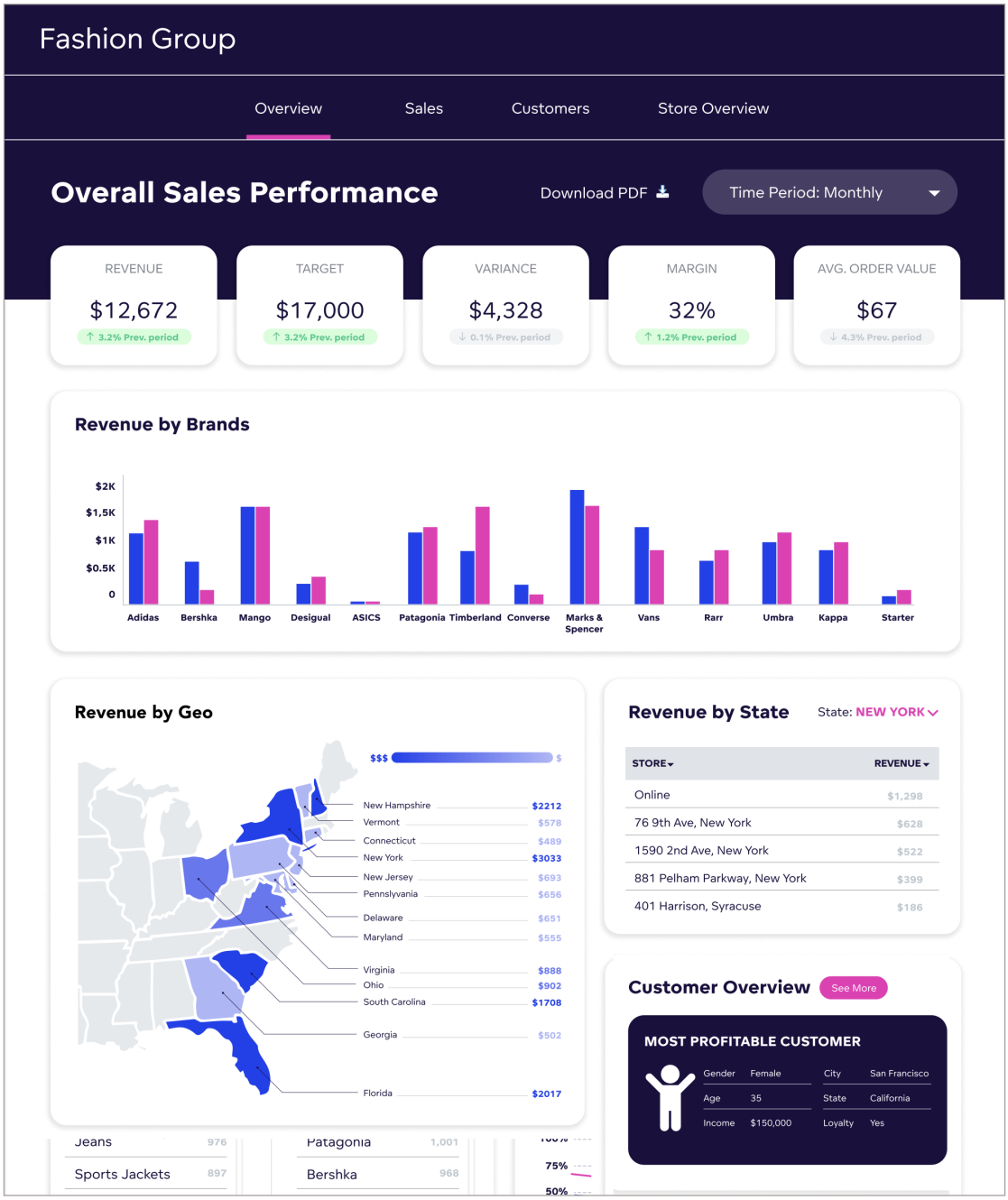
GoodData also integrates automated insights into its platform, taking user-friendliness and self-service to the next level. Automated insights eliminate traditional data analysis barriers (human error, missing information and connections) and enhance the overall user experience. Users can input requests in plain language, and the platform translates these into actionable insights, offering detailed explanations, predictions, and more.



Future-proof analytics/Flexible analytics

GoodData offers a flexible analytics environment that empowers companies to strategically deliver data, ensuring the right information gets to the right place for data-aligned decision-making. This forward-looking approach, rooted in future-proof analytics, prepares businesses to adapt to changes and trends, guaranteeing long-term success and providing users access as needed.

GoodData offers multiple customization, embedded analytics, and integration possibilities. Businesses can seamlessly tailor their analytics to match their brand identity, use APIs and SDKs to meet their specific needs, and embed analytics into their applications through different methods, such as iFrames, SDK libraries, or web components that are designed for dashboards and UIs and seamlessly integrate with company apps for a quick development process.



GoodData offers access to third-party resources and provides seamless integration with external applications, including Jupyter Notebooks and other BI tools. This enables sophisticated machine learning applications and advanced predictions, thereby expanding the platform's capabilities and effectively catering to a wide range of use cases.

Thanks to a consistent (single source of truth) metrics store and semantic layer, all the data, expressions, metrics, and KPIs remain the same when you use these other tools (developer notebooks, other BI or AI tools, etc.)

Flexible pricing model

GoodData offers a transparent and flexible pricing model tailored to meet the needs of different customers. Customers are given the following options to purchase licensing, depending on what works best for their use cases.

- **Workspace pricing:** Flexible workspace pricing allows for customization based on the inclusion of specific features and services. This flexibility aligns pricing with unique organizational needs to ensure value for each workspace and chosen features.
- **User pricing:** An affordable user pricing model, enabling teams to start small and scale up as the content becomes more valuable and usage grows.
- **Cost saving:** GoodData stands out from other vendors as it does not include a native cloud data warehouse (which can lead to increasing data warehousing costs) in its analytics stack. Instead, GoodData reduces costs through an advanced caching layer built on Apache Arrow.

Ready to learn more?

To further explore this topic, check out our ebook covering best practices for launching BI and analytics. To learn more about the GoodData platform's capabilities, sign up for a trial. Alternatively, request a demo, where our team will guide you through the platform and answer your questions.

Note: The above evaluation of features is based on our best understanding of publicly available information available at the time of publishing (Nov '23). To understand more specific details and feature differences readers are encouraged to perform their own research. All of the product names, logos, and brands used are for identification purposes only and remain the property of their respective owners. Use of them does not imply any affiliation with or endorsement by them.