

# The Best Embedded Analytics Tools:

A Detailed Comparison Guide



Data analytics processes transform data stored in multiple locations into insightful charts and dashboards. This is achieved by integrating diverse data sources, converting raw data into a structured format, modeling data to identify relationships, and generating <u>data visualizations</u> to facilitate data-driven decisions. When people talk about <u>embedded analytics</u>, they are referring to data analytics that is integrated within another software product (application) or web portal.

If you're looking for an ideal embedded analytics solution, it's important to consider the different types of embedded BI tools out there. To help with that, this ebook compares the leading embedded analytics solutions across the analytics and BI market.

#### Types of embedded BI solutions

Before we can compare the best embedded BI tools, it is important to understand the different ways analytics can be embedded. For comparison purposes, here is an overview of how embedding can be achieved:

- <u>Basic embedding via IFrame:</u> Copy and paste HTML code into the end user's application or web portal.
- <u>Web Components:</u> Behaves as a wrapper to provide simple integration of advanced analytics with minimal coding.
- Advanced embedding using SDK: Embed collections of pre-built dashboards and visualizations into end-user workflows using libraries (such as React SDK or JavaScript SDK).
- <u>Embedding programmatically:</u> Integrate dynamic visualizations or custom visualizations using third-party libraries and the provider's SDK without directly accessing the provider's interface.

Other ways of customizing and embedding might rely on **plugins**. These enhance dashboards with extra features like images, comment sections, or charts from other BI tools. The enriched visualizations are then seamlessly integrated into end-user workflows.

To learn more about embedded analytics methods, their pros and cons, and to help you decide which to choose, check out Which Embedding Method is Right for You?

#### **Embedded analytics software comparison**

Choosing the best embedded BI tool is crucial for your business and will help to ensure customer and vendor satisfaction. The right solution will drive business growth by seamlessly integrating visualizations, dashboards, or entire user interfaces into a user's workflow – eliminating the need to switch between multiple applications.

To help you evaluate the embedded analytics software options, we've created the table below. It outlines the embedding methods of the leading BI tools for embedding analytics currently on the market.

## GoodData vs Tableau vs Power BI vs Looker vs Sisense vs QuickSight vs Domo vs Qlik

Embedded Analytics Provider	GoodData	+++ +++ + a b   e a u	Power BI	& Looker	<b>(</b> ) sisense	QuickSight	DOMO	Qlik
IFrame								<b>⊘</b>
Web Components	<b>Ø</b>	×	×	<b>Ø</b>	×	×	×	<b>⊘</b>
Full Dashboard with Embedding with SDK						<b>②</b>	<b>②</b>	<b>②</b>
Single Visualization Embedding with SDK	<b>Ø</b>	<b>Ø</b>		<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	<b>Ø</b>	
Single Visualization Embedding Programmatically with SDK	<b>Ø</b>	8	<b>×</b>	8	<b>Ø</b>	8	8	8
Plugins SDK*	<b>⊘</b>	<b>⊘</b>		×		×	<b>⊘</b>	<b>⊘</b>

<sup>\*</sup> Plugins are typically built by developers according to a specific need. They can easily be added to dashboards. This more flexible method can complement iFrame and full-dashboard embedding.

IFrames are a popular way to embed content and can be used with many analytics platforms. However, the above-mentioned analytics vendors also offer more advanced embedding options.

**GoodData** supports <u>Web Components</u> – which is a step above IFrames in terms of flexibility. It ensures the seamless integration of GoodData analytics into web applications by transferring the analytics content in custom HTML tags.

GoodData.UI is a <u>React-based</u> framework for crafting custom analytics within React applications. It offers a deeply integrated and fully tailored analytics experience (you can also embed your own or pre-built <u>dashboard plugins</u>).

- **Tableau** offers Tableau Embedding API, which allows developers to integrate Tableau's interactive reports and dashboards into web applications. Tableau's <u>JavaScript API</u> enables the embedding experience to be customized. Additionally, a list of ready-to-use <u>dashboard plugins</u> is provided.
- Power BI has its Power BI Embedded service, a Microsoft Azure offering that allows developers to embed interactive Power BI reports and dashboards into applications. The service supports client-side embedding with <a href="JavaScript">JavaScript</a>, as well as server-side embedding. Developers can create their own custom visuals using the Power BI Custom Visuals SDK.
- **Looker** enables seamless integration of its dashboards into web applications.

  <u>Looker Embed SDK</u> provides extensive customization options, which offer a web-component-like experience when combined with custom elements.
- Sisense offers <a href="Embed SDK">Embed SDK</a> for customized embedding of separate visuals. <a href="SisenseJS">SisenseJS</a> can be used for embedding individual dashboards, widgets, and filters directly into web apps. Meanwhile, <a href="Compose SDK">Compose SDK</a> can create customized visualizations and other elements with a list of <a href="Sisense plugins">Sisense plugins</a> also available.
- AWS QuickSight enables interactive dashboards and visualizations to be embedded into applications via <u>AWS QuickSight SDK and API</u>. This makes it easy to share analytics within web and mobile applications.
- **Domo** provides <u>Domo Everywhere</u>, an embedding solution that allows users to integrate Domo's dashboards and cards into web applications, portals, or websites. The <u>Domo App Store</u> is also available for embedding custom dashboard plugins.
- **Qlik** offers embedding options with JavaScript libraries. There is also <u>Nebula.js</u>, a collection of libraries and components for developers that can be used to create web component-like embedding for Qlik Sense visualizations. Qlik also offers a list of dashboard plugins to be embedded in <u>Qlik Garden</u>.

If this embedded analytics comparison is insufficient, check out <u>Comparing the Best BI Tools: Selecting the Right Solution for Your Business</u>. In addition to embedding methods, you'll learn about other key business-driven capabilities.

#### Key features of an embedded analytics platform

<u>Embedded analytics for SaaS</u> prioritizes fast deployment, cost efficiency, scalability, and seamless integration with your product to enhance the success of SaaS offerings. When selecting the optimal embedding BI tool, consider key features such as self-service visualizations, customizable dashboards, scalability, and competitive pricing.

#### Self-service visualizations

Self-service visualizations empower end users to produce captivating, interactive visuals through an intuitive drag-and-drop interface. This eliminates the need for a data expert.

Embedded Analytics Provider	Ease of Creating Reports/Dashboards	Al-driven Features for Simplified Data Exploration	Self-service Support
(ල් GoodData	Low-code/No-code, user-friendly.	Yes	High
‡‡‡+ + a b   e a u	User-friendly, easy drag-and-drop.	Yes	Hight
Power BI	Simple drag-and-drop but can be cluttered	I. Yes	Moderate
5 Looker	Less intuitive for non-technical users.	Yes	Low
() sisense	User-friendly for basic tasks, complex for advanced customization.		Moderate
QuickSight	User-friendly, easy drag-and-drop.		High
DOMO	User-friendly, easy drag-and-drop.	Yes	High
Qlik.	User-friendly, easy drag-and-drop, no-code	e. Yes	High

#### Highly customizable dashboards

Customization options are crucial to embedded BI. Users need to be able to finely tailor the appearance and functionality of dashboards (or visualizations) to seamlessly integrate them into the existing interface

Embedded Analytics Provider	Range of Visualization Types	Customization Beyond Standard Options	Overall Flexibility
(ල් GoodData	Wide range of visualizations.	Full customization available with React SDK; includes out-of-the-box visualizations.	High
++++ + a b   e a u	Wide range, but customization can be difficult.	Customization can be challenging; limited advanced integration options.	Moderate

Power BI	Wide, akin to Excel.	Some visuals have limited customization options.	Moderate
5 Looker	Basic visualizations with lack of customization options.	Limited; primarily serves as a wrapper around iFrame.	Low
() sisense	Standard types.	Allows detailed customization through code.	High
QuickSight	Standard types.	Customized dashboards are limited.	Low
DOMO	Standard types.	Less flexibility in customization due to lower prioritization by Domo.	Low
Qlik.	Standard types.	Limited customization; mainly through IFrames and JavaScript libraries.	Low

### Scalability

In embedded analytics, scalability ensures the system can handle growing data volumes and more users as the business expands (without compromising performance). To successfully scale, a BI solution requires seamless integration with end-user applications, ease of analytics delivery, change management, and cost-efficient resource use. All of which help to ensure analytics capabilities grow in line with business needs.

Embedded Analytics Provider	Scalability Approach	Management and Provisioning
(d) GoodData	Shared semantic layer, workspace hierarchy, and inheritance model. Child workspaces inherit settings from the parent workspace.	Automated provisioning of child workspaces. Seamless updates across thousands of user groups, preserving customizations.
‡‡‡ + a b   e a u	Requires use of Tableau Cloud or Server for embedding and sharing.	Dashboards localized on devices via Tableau Desktop can lead to multiple conflicting versions of the same metrics – as various versions may exist across different user devices.
Power BI	Managed through service principals or master accounts.	Limited by a 1,000 workspace cap, which can affect scalability.
<b>%</b> Looker	Separate instances provisioned for scalability.	Scales efficiently for enterprise access, offering similar flexibility to GoodData.
() sisense	Sometimes dashboards created for individual customers are required.	Dashboard inheritance challenges; additional effort may be required for custom dashboards.

<b>Q</b> uickSight	Scaling requires integration with additional AWS products.	Scalability contingent on understanding and managing AWS data roles.
DOMO	Separate instances provisioned for scalability.	Similar to GoodData.
Olik.	Separate instances provisioned for scalability.	Similar to GoodData.

#### **Pricing**

An embedded BI solution's pricing model should focus on user access and interaction within a single-user environment. Ideally, the model shouldn't require payment for each individual user or be consumption-based. Below we outline the pricing models of the different vendors.

Embedded Analytics Provider	Pricing Model	Limitations	Cost Predictability
(d) GoodData	Per-workspace	No restrictions on users or workspaces. Unlimited users with different permissions.	Transparent pricing, predictable for future expansions.
‡‡‡ + a b   e a u	<u>Usage-based</u>	Limited options for more advanced integration and use cases.	Costs rise with increased user interaction, making future costs unpredictable.
Power BI	Node type and number of nodes	Limited computing resources and capacity for data loaded.	Costs for additional nodes and faster data processing.
<b>%</b> Looker	Based on number of separate instances	Tiers include a set number of users, upgrades, and queries. Exceeding tiers incurs extra costs.	Transparent cost calculation based on number of instances.
() sisense	Customized based on use case	No public information available for this comparison.	No public information available for this comparison.
<b>QuickSight</b>	<u>Per-session</u>	Costs vary between author and reader roles.	Using Amazon CloudWatch for tracking and cost management; more user interaction increases costs unpredictably.
DOMO	Consumption-based	Requires credits for platform usage.	<u>DomoStats</u> monitors usage; costs increase with usage, making future costs unpredictable.
Qlik.	Consumption-based	Restricted by data storage and feature availability.	Future consumption and costs are unpredictable, scaling with data volume.

#### Check out our other comparisons of GoodData alternatives

Head over to these resources for more detailed analysis of how we compare to leading GoodData alternatives:

AWS QuickSight Alternative: Choosing the Right BI Tool for Your Needs

Sisense Alternative: Elevate Your Analytics Game with Dynamic Solutions

Tableau Alternative: Addressing Challenges and Solutions for Modern Analytics

Qlik Alternative: Which tool is better for your analytics?

#### **Next steps with GoodData**

Still unsure whether to choose GoodData? Get a <u>free GoodData trial</u> for some first-hand experience. Have questions or want to see real-time use cases? <u>Request a demo</u> for a platform walkthrough.

**Note:** The above evaluation of features is based on our best understanding of publicly available information available at the time of publishing (Apr '24). 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.