



NUCLEUS
RESEARCH

EMBEDDED ANALYTICS TECHNOLOGY VALUE MATRIX 2024

ANALYST

Alexander H. Wurm

THE BOTTOM LINE

In 2024, embedded analytics has extended beyond traditional internal enablement use cases. End-user demands for analytics within their software and service experiences have become ubiquitous and embedded offerings have become critical to customer retention and revenue expansion. To align with this shift, vendors are competing to deliver functionally optimized solutions capable of supporting multi-tenant environments and increasingly look to integrated generative AI capabilities to differentiate platform usability for both embedded customers and their end-users. Leaders in this year's value matrix include Domo, Infor, Power BI, Oracle, Sisense and Tableau.



OVERVIEW

In 2024, embedded analytics continues to be a core component of the business intelligence landscape. As user expectations for analytics within their line of work and software experiences grow, embedded analytics platforms offer a compelling "buy" option in the build vs. buy debate. This approach significantly reduces traditional costs and development time while improving ease of management for multi-tenant environment. Organizations of

all types are leveraging these tools to enhance internal operations by equipping less technical departments and roles with tailored analytics. Additionally, embedded analytics has become a critical technology for independent software vendors (ISVs) and consumer-facing organizations, serving as a method of strengthening end-user experiences, driving engagement, and unlocking additional revenue streams through additional product tiers and upsell offerings.

Embedded analytics vendors are focusing their product innovation efforts to align with changing customer preferences, both in terms of functionality and usability. These vendors compete to offer comprehensive platforms that include modules for data management, preparation, integration, and governance, with a particular emphasis on capabilities for managing multi-tenant embedded instances. In terms of usability, vendors are integrating advancements in generative AI into their embedded offerings, introducing features such as searchable analytic experiences, data storytelling, and auto generation of analytic content which transform how users develop insights and interact with data. The most successful vendors are also investing in features related to user authentication, permissions, data governance, and attribution to ensure proper data management and maintain confidence in the accuracy of data usage.

In this Value Matrix, vendors are positioned according to the relative usability and functionality of their respective solutions, as well as the value that customers realized from each product's capabilities (Nucleus Research X222 – *Understanding the Value Matrix* – December 2023) and presented as a snapshot of the current market rather than an empirical ranking of vendors. The arrows indicate perceived momentum in the indicated direction with respect to usability and functionality. Positioning and momentum are informed primarily by conversations with end-users, along with the most recently released capabilities/features and areas of vendor investment.

LEADERS

Leaders in this year's Value Matrix include Domo, Infor, Power BI, Oracle, Sisense and Tableau.

DOMO

Domo is placed as a leader in the 2024 embedded analytics technology value matrix as recognized for its Domo Everywhere offering. With Domo Everywhere, businesses can embed Domo's analytics capabilities into their own applications, websites, and products, supporting use cases that extend revenue and save users' time. Organizations can increase

analytics adoption internally by embedding user-specific analytics directly into a user's core workflow and operational tools. Companies can also build and deliver highly customizable data products with significantly lower upfront investment and decreased maintenance costs compared to manual development. Furthermore, Domo Everywhere enables businesses to deliver insights and analytics to partners and customers using their existing data and infrastructure, often generating new revenue streams while differentiating a customer's products and services. Importantly, each end-user can operate on their own white-label instance and act as an administrator for their own reporting needs, drastically reducing ongoing administrative costs for the Domo Everywhere customer.

In the past 12 months, Domo has enhanced its embedded BI and analytics capabilities with the following key updates:

- Enhanced user experience via performance and validation improvements. This means faster load times and more reliable functionality for Domo Everywhere customers, resulting in significant time savings for end users accessing embedded analytics.
- Expanded self-service capabilities that allow customers greater control over creating, managing, and decommissioning their environments without extensive IT intervention. This reduced IT overhead and allows for quicker deployment of new analytics features.
- Increased scalability, enabling businesses to deliver analytics across multiple dedicated environments while maintaining security and compliance standards.
- Generative AI advancements within Domo.AI, providing machine learning, natural language processing, and predictive analytics features to embedded analytics users.

INFOR

Infor maintains its position as a leader in the 2024 Embedded Analytics Technology Value Matrix, recognized for the embedded analytics capabilities of its Infor Birst platform. Birst's embedded features deliver context-aware analytics directly within the transactional screens of core systems of record, expanding the reach of analytics beyond traditional dashboards and enabling more informed decision-making within the flow of business processes. The platform's architecture is built on a secure multi-tenant foundation, ensuring data isolation with physically separated storage per customer tenant, all managed through a comprehensive solution that encompasses end-to-end data management, granular user security controls, and streamlined provisioning. Birst's data management layer offers an intuitive and powerful user interface, supporting a wide array of scripting languages for sophisticated data transformation and merging operations. The platform's visualization component, Birst Visualizer, provides users with an accessible drag-and-drop interface for

creating complex graphs and charts, which can be easily shared across various stakeholder groups. Infor continues to differentiate its offerings by delivering a fully integrated data and analytics ecosystem, combining ETL processes, data lake architecture, enterprise data warehousing, API Gateway functionality, pixel-perfect reporting, interactive dashboarding, augmented insights powered by machine learning, advanced data discovery tools, flexible ad hoc query capabilities, self-service data preparation features, comprehensive mobile access, and AI enablement – all within a single, cohesive solution. This holistic approach allows organizations to leverage a unified platform for their entire data analytics lifecycle, from ingestion and processing to visualization and actionable insights, fostering data-driven decision-making across all levels of the enterprise.

ORACLE

Oracle is placed as a leader in the 2024 edition of the iPaaS Technology Value Matrix. Oracle Analytics is a complete platform for every analytics user role. Oracle Analytics helps drive business insights with data intelligence and embedded AI throughout to accelerate productivity and power better business decisions and actions. Oracle Analytics maintains its strength in embedding options, offering low-code solutions with embedded URLs, integrations with Oracle APEX and Oracle Visual Builder, and highly customizable embeddings using the Analytics JavaScript Framework for experienced developers. The platform caters to both line-of-business decision-makers needing information in their application workflow context, and IT leaders responsible for governing data and analytics environments provided to analytics users. Administrative and operational capabilities continue to be a strong point for Oracle Analytics, including embedded authoring features, developer customization hooks, and Git source control support for typical development lifecycles.

Updates throughout the past year include:

- **REST APIs.** This allows users to automate processes and programmatically access features and functionality in Oracle Analytics Cloud.
- **Generative AI Data Interactions.** This helps users interact with data and dashboards using natural language and generative-AI created responses. In addition, AI-generated avatars, enabled via a partnership with Synthesia, can act as a news reader to deliver data stories to business decision makers.
- **AI-Powered Document Understanding.** This capability leverages an integration with OCI AI Services that applies AI models to read documents—such as JPEG and PDF files—and extract key values and their context. This helps organizations parse information from documents to generate additional insights, even if the information has not been recorded in a central database.

- **Contextual Insights.** This makes interacting with analytics dashboards a more informative and engaging experience for consumers by using machine learning to recommend insights based on the type and state of the data being viewed.
- **Oracle Analytics Cloud AI Assistant.** This assistant translates natural language into actions, bridging the gap between an analyst's vision and its realization on the canvas. The Analytics Cloud AI Assistant understands the context of a user's question leveraging a built-in large language model (LLM) optimized for analytics conversations and tasks that recognizes the Oracle Analytics workbook and datasets.

POWER BI

Microsoft is a leader in the 2024 Embedded Analytics Technology Value Matrix, recognized for its Power BI platform. Microsoft Power BI's embedded analytics capabilities provide tools for integrating data analytics and visualizations into custom applications and websites. Developers can leverage Power BI Embedded to embed reports, dashboards, and visualizations, enabling viewable or self-service data experiences within their applications. With support for data modeling, data connectivity, and custom visual creation, developers can craft customized analytics solutions tailored to their end-users. Additionally, Power BI's security, scalability, and multi-tenancy support gives embedded customers the ability to serve multiple instances within a single deployment. Additionally, usage monitoring, deployment options on Azure, customization, and comprehensive APIs and SDKs enhance the development experience. By directly integrating with Microsoft solutions, Power BI maintains its position in the embedded analytics space as an established player.

Recent updates delivering value for customers in the past year include:

- The introduction of Copilot in Power BI, which leverages generative AI to enhance data analysis and visualization capabilities. Copilot assists users in creating visuals, writing DAX formulas, and generating insights from data, making Power BI more accessible to users of all skill levels.
- Improvements to the Power BI Service, including the ability to edit data models directly in the browser. This feature allows users to make changes to their data models without needing to use Power BI Desktop, streamlining the workflow for many users.
- Enhanced integration with OneDrive and SharePoint, enabling users to open, save, and share Power BI files directly from these platforms. This integration improves collaboration and file management for Power BI users within the Microsoft ecosystem.

- The release of new visualization options and formatting capabilities, such as more styling options for column and bar charts. These enhancements provide users with greater flexibility in creating visually appealing and informative reports.
- Continued improvements to the Power BI connector ecosystem, with updates to existing connectors and the introduction of new ones, expanding the platform's flexibility.

SISENSE

Sisense is placed as a leader in the 2024 Embedded Analytics Technology Value Matrix. Sisense's analytics platform simplifies data connections, preparation, and interactive dashboard creation. The Sisense Fusion solution allows customers to integrate Sisense analytics into their own applications with customizable embedded content, maintaining brand consistency. Users can perform data analysis directly within the application interface, eliminating the need to switch between environments. Sisense Fusion supports connections to various data sources, including data warehouses, relational databases, NoSQL stores, and Hadoop data lakes while its built-in data modeling engine facilitates data transformation and manipulation for advanced analysis. Sisense extends its capabilities through Sisense Infusion Apps, offering a natural language query interface integrated into popular productivity suites like Office 365, Teams, Google Workspace, and Slack via the Sisense JavaScript API.

Throughout the past year, Sisense has delivered multiple updates to its embedded BI and analytics solution. These include:

- Sisense launched a beta version of its Analytics Chatbot, enabling users to ask natural language questions and receive narrative explanations of their data.
- The Compose SDK was enhanced with new React components and APIs, allowing developers to create customized analytics experiences and integrate the Analytics Chatbot seamlessly.
- The AI-powered Exploration Paths feature was expanded to provide suggestions from all dashboards using the same data model, facilitating deeper data exploration.

TABLEAU

Tableau is placed as a leader in the 2024 Embedded Analytics Technology Value Matrix. Tableau's embedded analytics offering provides capabilities for integrating interactive data visualizations and business intelligence capabilities into custom applications, web portals, and third-party software. Leveraging Tableau's JavaScript API, developers can embed dashboards and visualizations while maintaining granular control over functionality,

appearance, and user interactions. The platform supports advanced customization options, including preset dashboard filtering, custom interface elements, and external integrations, enabling a tailored analytics experience that aligns with existing application workflows. Tableau's REST API facilitates automated user provisioning, content management, and permissions control, while the on-demand access feature allows for secure authentication without the need to maintain separate user accounts within Tableau. The embedded analytics solution is built on Tableau's core analytics engine, providing access to features such as AI-powered insights through Einstein, real-time KPI tracking with Tableau Pulse, and web authoring capabilities for end-users to modify visualizations directly.

Product updates throughout the past year include:

- Tableau introduced Tableau Pulse, a data experience that delivers personalized, AI-powered insights directly to users. For Tableau's embedded analytics customers, Pulse provides real-time, contextual data insights that can be integrated into custom applications and portals, allowing end-users to access and act on critical business metrics without leaving their primary work environment.
- Salesforce unveiled Tableau Einstein, an AI-powered visual analytics platform that integrates Agentforce to accelerate the path from raw data to actionable insights. This adds value as Tableau Einstein can now autonomously discover and surface insights directly within their custom applications and workflows, enabling users to engage with data and take immediate action without switching contexts.

EXPERTS

Experts in this year's Value Matrix include GoodData, Logi Symphony, Looker, and Qrvey.

GOODDATA

GoodData is placed as an expert in the 2024 Embedded Analytics Technology Value Matrix. GoodData's embedded analytics offering leverages a highly scalable and flexible architecture capable of supporting multiple deployment models including cloud, hybrid, and on-premise environments, while delivering sophisticated multi-tenancy setups. At its core, the platform embraces Analytics as Code principles, enabling development teams to automate, customize, and integrate analytics workflows directly into their applications using familiar software engineering practices. This approach accelerates the analytics development lifecycle and facilitates integration with existing systems. The platform's embedding capabilities are complemented by monetization options, allowing businesses to create tiered analytics offerings, differentiate features across customer segments, and utilize

multi-tenancy and inheritance mechanisms for cost-effective scaling. By combining these advanced features with its API-first architecture and support for domain-specific languages (DSLs), GoodData's embedded solution empowers organizations to seamlessly bring analytics into their products and services, driving data-driven decision-making and unlocking new revenue streams.

Product updates throughout the past year include:

- GoodData announced enhanced support for data federation, enabling organizations to query and analyze data from multiple sources without data replication.
- GoodData expanded its multi-database model support, enabling more complex data environments to be modeled within a single solution, making it easier to manage and query data across different databases.
- GoodData formalized and matured its Analytics as Code approach making it easier for developers to integrate and automate analytics within their development processes including things like version control, CI/CD, roll back and integration with code repositories like Github and Bitbucket. This allows collaboration between users who wish to interact through code and UI-based users, all in one platform.
- GoodData launched GoodData.UI bringing advanced customization and performance optimization features to the front-end analytics experience, improving responsiveness, customization and interactivity for embedded analytics.
- GoodData introduced new end user experiences including AI capabilities, one-click ML, enhanced scheduling and alerting, new front end layouts, enhanced integrations to third party tooling natively, through APIs, and through Zapier integration.

LOGI SYMPHONY

Logi Symphony from insightsoftware is positioned as an expert in the 2024 Embedded Analytics Technology Value Matrix delivering a comprehensive analytics and business intelligence suite designed for ISVs and application teams. By embedding Logi Symphony, product application teams can elevate their offerings beyond traditional reporting, equipping their applications with AI-powered insights and real-time data interaction that enable end-users to drive deeper exploration and derive actionable intelligence.

For application teams, Logi Symphony offers low/no code development, allowing connection to diverse data sources while performing complex calculations. Its extensive APIs and JavaScript libraries facilitate iframe-less embedding, granting teams pixel-perfect control over layout and interactivity, ensuring that analytics integrate seamlessly into their applications. For the end-users of these applications, Logi Symphony's architecture supports multi-tenancy with security controls and single sign-on capabilities, providing a secure

experience that aligns with existing authentication systems. Additionally, the solution offers customization options, including unique themes, CSS styling, and bespoke visualizations ensuring a consistent and branded experience to meet the specific needs of end-users.

InsightSoftware has introduced several significant updates to Logi Symphony over the past year:

- Introduction of Logi AI for Advanced Analytics. Logi Symphony integrated customizable AI allowing ISVs to embed AI-driven insights with flexibility in language models, chatflows, and data governance.
- SaaS deployments. The vendor launched a SaaS offering, streamlining deployment, reducing maintenance, and accelerating time-to-market for new applications while providing a scalable turnkey BI solution for small and medium size businesses.
- Enhanced self-service capabilities. New self-service analytics capabilities allow non-technical users to independently create reports, generate SQL queries, and format data without relying on IT support, democratizing data access.
- Enhanced user experience and multi-tenancy. Improvements include streamlined navigation, multi-tenancy management, and enhanced visual data discovery, simplifying both developer and end-user interactions.
- Expanded data integration and visualization. New connectors such as SAP S/4HANA, were introduced along with improved data source visualization tools, providing users greater clarity around complex data relationships and BI integration capabilities.

LOOKER

Looker is placed as an expert in the 2024 Embedded Analytics Technology Value Matrix. Looker's embedded analytics offering provides an API-first platform for integrating data-driven insights into applications. Leveraging iFrame embedding and SSO authentication, developers can deploy interactive dashboards, visualizations, and data exploration tools within their web applications. The platform's LookML data modeling layer enables consistent metric definitions across the organization, while its in-database architecture ensures real-time query performance and scalability. Looker's embedded solution supports multi-cloud deployments and offers extensive database connectivity options, including support for SQL-based data sources and integration with Google Cloud's AI capabilities. Advanced features like row-level security, customizable theming, and the Looker API allow for fine-grained control over data access and user experience.

Updates throughout the past year have extended the value of Looker's embedded analytics offering for its customers.

- Looker now integrates with generative AI technologies, allowing users to incorporate LLMs into their data products.
- Looker introduced an AI assistant that accelerates analytical workflows, including the creation and configuration of visualizations, formula creation, data modeling, and report creation underpinned by both Looker's semantic layer and Gemini foundational models.
- Looker now offers extensions that integrate directly with Vertex AI, Google's machine learning platform. This integration enables users to create more sophisticated and powerful custom AI workflows within their Looker-embedded analytics.

QRVEY

Qrvey is placed as an expert in the 2024 Embedded Analytics Technology Value Matrix. Qrvey offers a purpose-built, multi-tenant analytics platform designed specifically for SaaS applications, addressing the unique challenges faced by software products in delivering scalable and secure analytics to external users. The platform is cloud-native, leveraging a service-based architecture that enables deployment across multiple cloud environments, including high-security setups like GovCloud. Qrvey's analytics layer integrates seamlessly with existing SaaS infrastructure, providing a comprehensive suite of modular components including dashboards, report builders, surveys, forms, and workflow automation. The platform's architecture incorporates a data lake, semantic layer, and transformation capabilities, allowing for efficient handling of structured, semi-structured, and unstructured data from various sources. Qrvey emphasizes developer-friendly integration, high performance at scale, and granular security controls, enabling SaaS providers to rapidly implement and monetize analytics features while maintaining precise control over data access and user entitlements.

ACCELERATORS

Facilitators in this year's Value Matrix include Metabase, ThoughSpot, Yellowfin, and Zoho.

METABASE

Metabase is placed as an accelerator in the 2024 Embedded Analytics Technology Value Matrix. Metabase's embedded analytics solution allows integration of data visualizations and interactive dashboards into external applications. The platform supports three embedding types: interactive, static, and public, each catering to different security and functionality

requirements. Interactive embedding, available in Pro and Enterprise plans, enables multi-tenant, self-service analytics with SSO integration and data sandboxing capabilities. It allows users to create custom queries, models, and dashboards within their data sandbox. Static embedding, also known as signed embedding, provides a secure method for embedding charts and dashboards without granting ad hoc query access. The platform also offers customization options, including white-labeling, to maintain brand consistency. Additionally, Metabase provides comprehensive usage analytics for embedded content, enabling organizations to track user engagement, identify popular visualizations, and optimize performance.

In the past 12 months, Metabase delivered consistent quarterly updates to its embedded analytics platform bringing new capabilities and enhancements to existing functionality.

- Metabase 50 introduced a centralized performance tab that consolidates all caching controls, including database caching and model persistence. This allows for more granular control over caching policies at the instance, database, dashboard, and question levels, providing greater flexibility and easier setup for embedded analytics.
- Metabase 49 brought several dashboard enhancements, including the ability to show filters only on relevant tabs, section templates for quick dashboard setup, and the option to set required filters with default values. These improvements make dashboard creation and customization more efficient for embedded use cases.
- In Metabase 50, the permissions system was redesigned to be more intuitive. The previous "data access" and "native query editing" permissions were replaced with clearer "view data" and "create queries" options, making it easier to manage user access in embedded environments.
- Metabase 49 improved trend charts, allowing users to add up to three comparisons on one chart and offering more options for configuring time ranges and benchmarks. This enhancement provides richer context and more detailed KPI tracking for embedded analytics users.

THOUGHTSPOT

ThoughtSpot is placed as an accelerator in the 2024 Embedded Analytics technology. ThoughtSpot Embedded is an embedded analytics platform that integrates AI-powered analytics capabilities into existing applications, portals, and websites. The solution leverages a Visual Embed SDK and platform APIs, allowing developers to implement low-code or pro-code integrations as needed. At its core, ThoughtSpot Embedded utilizes natural language processing to enable search-driven analytics, allowing users to explore data through intuitive queries. The platform supports customizable components, including charts, KPIs, visualizations, and search bar elements, all of which can be tailored to match brand

aesthetics. Advanced features include automatic trend analyses, infinite drill-downs, and the ThoughtSpot Modeling Language (TML) for enhanced scriptability. The system integrates with modern cloud data platforms like Snowflake, Databricks, and Amazon Redshift, ensuring scalability and efficient data processing.

Updates throughout the past 12 months include:

- ThoughtSpot Sage, the company's AI-powered analytics tool, now incorporates conversational BI which allows users to ask questions and follow-ups about their data in plain language, making it easier for non-technical users to perform deeper analysis.
- ThoughtSpot introduced the capability to teach and train ThoughtSpot Sage on associations between business terms and data models and verify whether the mappings between natural language are correctly utilized.
- An AI assist enabling data teams to generate SQL from natural language to accelerate data modeling workflows and refine queries.

YELLOWFIN

Yellowfin is placed as an accelerator in the 2024 embedded analytics technology value matrix. Yellowfin's embedded analytics offering provides a suite of tools for integrating business intelligence capabilities into existing applications. The platform supports multiple integration methods, including JavaScript API for web applications, REST API for traditional applications, and SOAP API for legacy systems. Developers can leverage these APIs to embed various analytical components such as dashboards, reports, and visualizations directly into their software, while maintaining full control over the user experience. Yellowfin's architecture allows for flexible data source connections, enabling the merging of application data with external sources without modifying core application code. The platform also offers advanced features such as Natural Language Query (NLQ), AI-based alerting through Signals, and data storytelling capabilities, all of which can be embedded to enhance the accessibility of data insights. Additionally, Yellowfin provides security and compliance management, making it suitable for industries with stringent data protection requirements.

Updates delivered within the past year include:

- Yellowfin introduced Ask Yellowfin. An AI-powered chatbot assistant delivering real-time support and guidance for embedded analytics users.
- Yellowfin delivered AI-powered natural language query (NLQ) capabilities as an extension of its Guided NLQ feature, now enhanced with large language models.

- Yellowfin also released an AI-powered developer assistant, helping users generate code fragments for common tasks to reduce development time for embedded content.

ZOHO

Zoho is recognized as an accelerator in the 2024 embedded analytics technology value matrix. Zoho's embedded analytics solution enables businesses to integrate full-featured BI and analytics capabilities into their applications and workflows. The platform features enhanced generative AI capabilities, including natural language querying (Ask Zia), natural language generation (Zia Insights), and auto analysis, augmenting its self-service functionality. Zoho accelerates time to market with prebuilt SDKs, seamless integration using JWT and SAML authentications, and curated, interactive reports and dashboards that deliver decision-driving insights within application workflows. The platform also includes in-line data preparation powered by a visual ETL data pipeline builder for integrating, preparing, transforming, enriching, modeling, and cataloging data, with support for NLG-enabled data transforms. Users can orchestrate the pipeline with Zoho Flow, the platform's workflow engine. Zoho's embedded analytics solution also allows for extensive customization and branding options, enabling tailoring of the embedded components to blend with the host application's user interface.

Recent updates include:

- Expanded data connectivity featuring over 35 new prebuilt connectors to databases, cloud-hosted services, and business applications. Zoho also introduced a visual pipeline builder to help users simplify data aggregation and preparation tasks.
- Zoho Analytics has added Data Science and Machine Learning (DSML) capabilities, allowing users to build custom ML models for analytics workloads.
- Zoho Analytics has enhanced its AI capabilities with improved Zia Insights, Auto Analysis engine, anomaly detection, cluster analysis, and multilingual Ask Zia support, all of which can be integrated into embedded Zoho applications.
- New chart types and visualization features including sankey charts, racing charts, spark lines in pivot tables, geo map layers, sunburst charts, conversion bar charts, and tree maps have been added to Zoho Analytics, providing more options for visually analyzing data in embedded applications.
- The introduction of JS APIs/SDK which allows developers to better integrate and control Zoho Analytics visualizations in their web applications.
- CSS customization features have been added to Zoho Analytics, allowing for better visual alignment with brand identity in white-labeled embedded products.

CORE PROVIDER

Core Providers in this year's Value Matrix include Luzmo, MicroStrategy, Sigma Computing, and Toucan Toco.

LUZMO

Luzmo is placed as a core provider in the 2024 Embedded Analytics Technology Value Matrix. Luzmo offers a low-code embedded analytics platform tailored for SaaS companies, enabling integration of interactive dashboards and data visualizations directly into software applications. The platform's API-first design philosophy facilitates connection to existing data warehouses and streamlined embedding processes, reducing development cycles and resource investment. Leveraging a drag-and-drop interface, Luzmo empowers product managers and customer success teams to construct analytics experiences without extensive engineering intervention. The platform's architecture supports custom events, allowing for bi-directional communication between dashboards and host applications, enhancing interactivity and enabling data-driven actions within the software ecosystem.

New capabilities delivered in the past 12 months include:

- Luzmo launched an AI Chart Generator powered by OpenAI's ChatGPT. This feature simplifies chart creation by providing suggestions based on datasets or text prompts, speeding up data analysis and decision-making.

MICROSTRATEGY

MicroStrategy is placed as a core provider in the 2024 Embedded Analytics Technology Value Matrix. MicroStrategy's embedded analytics offering provides a comprehensive suite of tools for integrating advanced data analysis capabilities into existing applications and workflows. The platform leverages a semantic layer, enabling multi-tenancy and tailored data experiences through an object-based graph architecture. It supports diverse deployment options with a microservices architecture, facilitating integration with existing tech stacks, DevOps processes, and CI/CD pipelines. The solution incorporates AI-powered insights, including augmented analytics and guided machine learning workflows. MicroStrategy's embedded analytics also features enterprise security protocols, including multi-factor authentication, role-based access controls, and FedRAMP certification. The platform's open cloud architecture allows connections to data sources and deployments in various environments, while its performance is enhanced through direct query optimization, in-memory capabilities, and push-down data blending.

Updates throughout the past 12 months include the following:

- MicroStrategy integrated advanced natural language processing capabilities into its embedded analytics platform. This allows users to ask questions and receive insights in plain language, making data exploration more intuitive and accessible for non-technical users.
- MicroStrategy bolstered its multi-tenancy capabilities within the embedded analytics platform. This enhancement allows organizations to better manage and secure data for multiple clients or departments within a single instance, improving scalability and reducing infrastructure costs.

SIGMA COMPUTING

Sigma Computing is placed as a core provider in the 2024 Embedded Analytics. Sigma Computing's embedded analytics offering leverages iFrame embedding to integrate analytics capabilities into customer-facing applications. The platform supports both single and multi-tenant architectures, allowing for granular user permission controls and dynamic role switching. It interfaces directly with cloud data warehouses, enabling real-time querying and interactive data exploration without requiring custom SDK integrations. Sigma's solution includes no-code analytics tools for creating visualizations and dashboards, which can be embedded alongside more comprehensive data exploration features. However, the reliance on iFrames may result in slower performance compared to native integration methods, and the lack of deep customization options means embedded content retains a distinct Sigma-branded appearance.

Updates throughout the past 12 months include the following:

- Sigma computing raised \$200 million in Series D Funding to drive investment in AI infrastructure, data application development, and enterprise-wide collaboration.
- Sigma Computing has achieved ISO 27701 certification and compliance with ISO 27017 and 27018 standards, reinforcing its commitment to robust information security, privacy, and data protection practices.
- Sigma has unveiled new data modeling features that enhance flexibility and consistency in data analysis, including AI-powered tools like Explain Viz and Formula Assistant, as well as expanded OAuth coverage for write access to platforms like Snowflake and Databricks.

TOUCAN TOCO

Toucan Toco is placed as an accelerator in the 2024 Embedded Analytics Technology Value Matrix. Toucan Toco's embedded analytics offering provides a solution for integrating data visualization and analysis capabilities into third-party applications. The platform supports

various integration methods, including iFrames and Web components, allowing developers to embed individual graphs or entire dashboards with minimal coding effort. Toucan's architecture enables connection to data sources, both live and stored, through built-in connectors. Toucan's embedded analytics components are customizable, allowing for white-label visuals that align with the host application's branding. The platform emphasizes security, with options for on-premise deployment to maintain data isolation. The solution also incorporates a proprietary YouPrep tool for efficient data preparation and transformation.