



The Platform for Data Experiences

Looker is Google Cloud's enterprise platform for business intelligence, data applications, and embedded analytics. With Looker, companies can deliver actionable business insights, create new value streams, and infuse data into products and workflows to move the business forward.

Business Challenge

Most large-scale organizations' current BI systems do not adequately support digital transformation. Decision makers need the ability to quickly and cost effectively process and make use of their rapidly growing datasets.

Risk of Irrelevancy

Most large-scale organizations' current BI toolset does not adequately support timely decision making approach. Business leaders know they need to modernize the data ecosystem to serve their customers and gain economic advantages.

Opportunity Cost of Unused Data

Data is hugely valuable, but organizations are unable to leverage it to drive business growth. Business leaders need a way to productize and monetize data quickly, without scores of engineers.

Inefficient and Data-Deprived Workforce

Employees at all levels waste time on manual tasks and make decisions - both large and small - with incomplete or inaccurate information.

Looker Overview

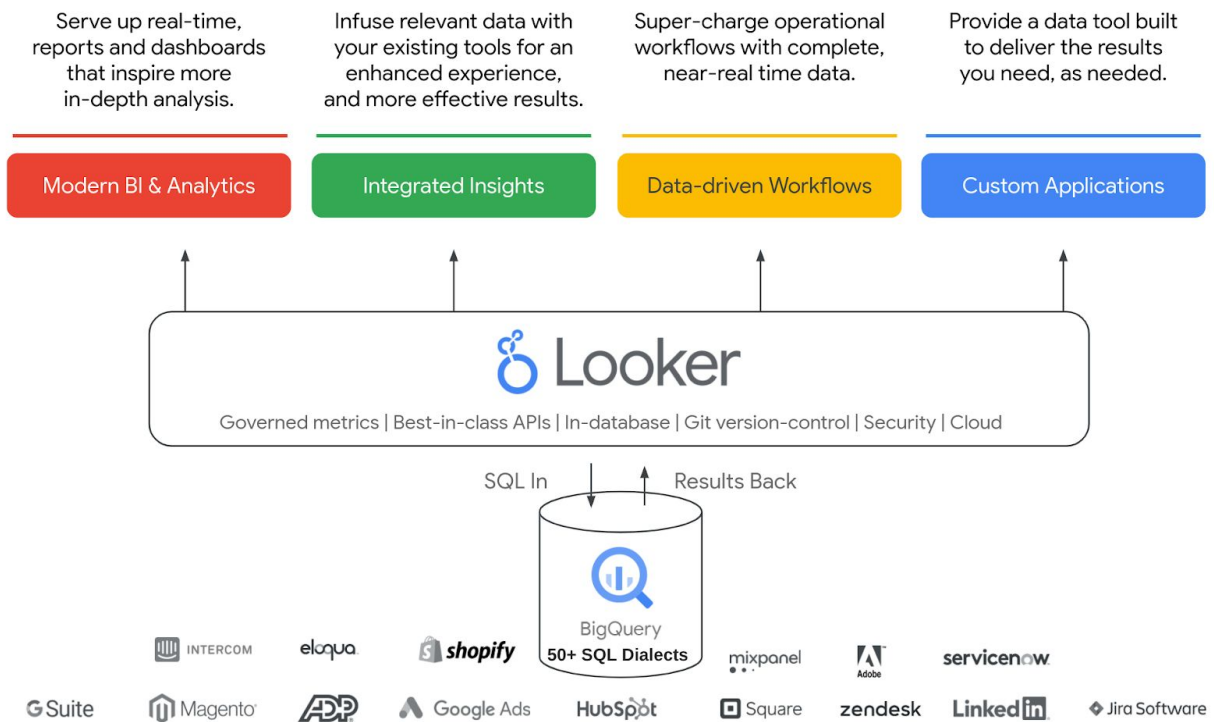
Google's mission statement is "to organize the world's information and make it universally accessible and useful". Looker meets this guiding principle by providing a cloud-native Enterprise BI Platform enabling secure access to near real-time data.

To unlock the full value of data, organizations need solutions that transcend traditional BI and infuse data into operational workflows. Looker allows companies to supply employees, customers, operational workflows, products, and services with timely and trusted data that powers experiences tailored for every part of their business. Looker's modern BI solution empowers everyone in the organization to ask sophisticated questions and get real-time, trusted insights that improve decision making and can be operationalized to power workflows in other tools and systems.

Looker Key Attributes

Looker is an open and cloud agnostic BI tool which has these unique attributes:

In-database Architecture	Semantic Modeling Layer	Cloud Native
No additional data movement or storage	Define standard business logic across the business	100% web-based
Access to all underlying data (no cubes, aggregates)	Robust data permissions (row level, column level, content)	API extensibility (an API for BigQuery)
Leverages native BigQuery functionality such as BQML, GIS	Git-integrated IDE with version control	Unlimited data experiences
		Multi-Cloud and on-premise



Advantages of Looker

Flexible Modeling Layer: Looker has built a powerful data modeling language (LookML). LookML provides data analysts an easier way to centrally describe dimensions, aggregates, calculations and relationships in a database and make it available for the rest of the users. This allows Looker users to see a clean data platform describing their data that abstracts away the details of how and where the data is stored.

Extensible web architecture: Looker platform is used to build robust data-driven applications. Every Looker query and visualization is addressable by URL. Its simple extensibility and connectivity to web services enable application developers to integrate Looker with their applications and workflows, and embed interactive data visualization elements in their app for in-app contextual insights.

100% In-database analytics: Unlike traditional BI tools, Looker takes advantage of the in-database processing capabilities of the modern data warehouses for massive scalability and operational efficiency. This also enables business users to discover insights on the entire data set and take advantage of the federation and data virtualization across multiple sources.

Augmented predictive Insights: In 2018, Looker added integrations for data science use cases including support for Google BigQuery ML, as well as integrations with TensorFlow for data science workflows. This makes it easy for analysts to augment BI reports and dashboards with predictive insights.

Native multi-cloud integration: Looker supports native integration with leading cloud data warehouses such as Google BigQuery, AWS Redshift, Athena, Azure SQL DW and Snowflake. Looker runs natively on all three major public clouds as well as on-prem, making it easy for customers to adopt Looker as they modernize their enterprise data warehouses in the cloud. While we deepen the integration of Looker into Google Cloud Platform (GCP), customers will continue to benefit from Looker's multi-cloud capabilities and its ability to connect to many data sources like Oracle, Microsoft SQL Server, Teradata and more in Google Cloud, on other Public Clouds, and in *on-premise data centers*.

Secure your data where it lives: Looker leaves all of your data where it's most secure—in your database. Manage data access for all of your users by setting permissions that control access to data at the row or column level.

Go beyond simple database business intelligence: Looker's platform lets you take advantage of advanced analytical functionality. This includes machine learning, JSON ingestion, ETL integration and usage monitoring.



Machine Learning

Build and train machine learning models with tools such as BQML and SageMaker.



JSON Support

Easily ingest nested structures like JSON without the need to pre-flatten datasets.



ETL Integration

Sync ETL schedules with cached data in Looker to maximize dashboard performance.



Monitoring

Surface database usage data in Looker to optimize your performance and spend.

Google Cloud Professional Services Offerings

Google Cloud's Professional Services Organization (PSO) is able to work directly with customers to help design, build, and deploy Looker based solutions and to unlock the value of the data and cost-effectively process data analysis. The below outlines a services engagement to allow customers to assess Looker comprehensively.

Key activities	Deliverables	Engagement Details
<ul style="list-style-type: none"> ● Strategy Session <ul style="list-style-type: none"> ○ Review project goals and objectives ○ Identify initial business use cases ○ Review and document business metrics and data mapping for use cases ○ Document data security requirements ● Technical Setup Review <ul style="list-style-type: none"> ○ Provide advice and guidance on key decision points on how Looker will be set up for development and production environments. ● Looker Deployment Setup <ul style="list-style-type: none"> ○ Assist with setup of Looker based on information and decisions from the Technical Setup Review. ○ Ensure security and permissions best practices are followed. ● Looker Data Model Development & Demonstration <ul style="list-style-type: none"> ○ Demonstrate and share best practices and advice on LookML model development ○ Provide guidance on building user-friendly dashboard ○ Drive optimum feature usage ● Summary of Next Steps <ul style="list-style-type: none"> ○ Identify open questions, action items, and recommended next steps for ongoing Looker development. 	<ul style="list-style-type: none"> ● LookML data model <ul style="list-style-type: none"> ○ LookML code development through an iterative process supporting reporting requirements of the identified use cases ● Looker Content Development <ul style="list-style-type: none"> ○ Assist with the creation of dashboards. Illustrate best practices for managing content access and curation. ● Business User Training <ul style="list-style-type: none"> ○ Enable your business analysts to get insights from Looker. ● Executive Summary & Deployment Documentation <ul style="list-style-type: none"> ○ A full technical write up of the Looker solution, including instructions to deploy the solution ○ Document a summary of the project and solution build, and a final presentation for your stakeholders ○ Recommendations for ongoing success with Lookers 	<ul style="list-style-type: none"> ● Prerequisites <ul style="list-style-type: none"> ○ Organizational support (buy-in and collaboration), relevant teams for different sessions (Data Engineering, Developers, Analysts) and executive sponsorship. ● Data Readiness <ul style="list-style-type: none"> ○ Data required for the initial business use case must be stored in a data warehouse supported by Looker. ● Data Privacy <ul style="list-style-type: none"> ○ Looker Professional Services expects all stakeholders to adhere to data privacy industry standards regarding protection of personal data. This includes taking necessary precautions to prevent Looker Consultants from accessing any data containing personally identifiable information during the services engagement. ● Timeline <ul style="list-style-type: none"> ○ Typically 6-8 week long engagement. This may change based on scoping as per needs and stakeholder availability. ● Google Team structure <ul style="list-style-type: none"> ○ The typical team consists of a dedicated Looker Professional Services Engagement Manager and Consultant. Work is performed onsite and offsite, as needed. ● Cost <ul style="list-style-type: none"> ○ Depending on the services and Looker version needed, the solution costs \$250k-\$325k

Let's connect to discuss how Google's Looker BI tool can help your organization!