

ANALYTICS

Solve Your Complex Analytics Challenges with Ease

Qlik Cloud Analytics

INTRODUCTION

Qlik delivers market-leading
Al-powered analytics that help
people of all skill levels make
data-driven decisions in the
most challenging environments.

With data comes the potential for transformative power, but organizations have not come close to fully realizing this goal.

Analytics are the key to unlocking the value in your data, but only if they can better inform



decisions made by hundreds of people in real-world environments each day. And this needs to happen in complex scenarios with multiple data sources, different types of user-cases, and the need for robust governace and performance. To put it plainly, this is not easy.

Qlik provides maket-leading cloud analytics that help people of all skill levels make data-driven decisions and take the best possible actions in the most challenging environments. Using our unique Associative Analytics Engine, we deliver best-in-class visualization and dashboards, augmented analytics, and action-oriented analytics capabilities for a full range of users and use cases. We amplify the power of your data and people through Al and machine learning while driving intelligent action through alerting, automation, and mobility. And you get all this on a fully independent, governed cloud platform with unmatched performance and seamless scalability.

Qlik offers powerful analytics capabilities not possible with query-based tools. Our associative engine uniquely combines all your data, not matter how many sources or how complex, and supports free-form, interactive exploration at the speed of thought — in ways you simply can't achieve with relational database architectures. We add Al and ML that delivers uniquely powerful automated insights, natural language interaction, predictive analytics, and generative Al. We take people beyond the dashboard with action-oriented capabilities that help you rapidly respond to events and trends in your business. And we deliver this on the only independent, end-to-end data and analytics platform, highly scalable and fully governed, freeing you from the constraints of cloud and stack mega- vendors.

With Qlik, more people of all skill levels and roles can benefit from the power of your data, and organizations can solve their most complex data challenges. You can deliver the most meaningful insights in the right ways to the broadest range of people and drive action to capture every business moment, leading to tremendous value and transformational outcomes.

Purpose-Built for Analytics

Qlik delivers a unique and powerful analytics experience for everyone in every area of your business. It is designed to promote intuition and data-driven decisions for users of all skill levels, allowing people to easily explore and quickly gain trusted insights to take action and solve your most complex problems.

Associative Exploration

Business user exploration in Qlik Analytics is unmatched. Users can freely ask questions using simple interactive selections and search. Our engine instantly responds with answers after each click, recalculating all analytics to the new context and highlighting both associated and unrelated data through easy-to-understand color cues. No boundaries. No restrictions.

Your people are empowered to follow their own paths to discovery without having to build visualizations or author content.

In addition, associative search provides an intelligent navigation experience unlike any other analytics solution. Search across your entire application and dataset to refine context and make discoveries. Our engine not only reveals individual matches but also the possible combinations in your data, allowing you to apply multiple selections directly through search.



The Associative Difference®

Relational databases and SQL are rigid structures designed in the 1980s for transactional systems, not modern analytics. Analytics tools that rely on query-based approaches struggle to combine data sources, support interactive user exploration, and retain performance and flexibility at scale.

With unique associative technology, our purpose-built analytics engine enables users of all skill levels to explore their data freely without limitations. It brings together unlimited combinations of data, achieving a "many-to-many full outer join" without leaving any data behind. It offers unprecedented freedom of exploration through interactive selections and search — without having to author content. By instantly recalculating all analytics to the new context and revealing both related and unrelated values as you click, you can easily discover hidden insights that query-based tools would simply miss. Even better, it happens as fast as you can think.

Our engine calculates analytics using a full set of record-level data, scaling to massive data volumes and large numbers of users without sacrificing speed or flexibility. This unique engine technology is our primary advantage, backed by more than 20 years of innovation and investment.

Data Discovery

Best-in-class visualization and discovery is always at your fingertips. Users can create and explore through a simplified authoring experience with assistance from AI to accelerate the creation process. Data sources can be easily connected together with data profiling and combination suggestions. Analytics are created through an intuitive drag-and-drop experience, with easy access to data tables, fields, filtering and properties, and automated authoring that auto-generates visualizations and Natural Language Generation. More than 30 smart, fully responsive visualizations provide a beautiful experience and feature innovative techniques to summarize data shape, highlight patterns and hotspots, and pinpoint outliers. Geospatial analysis and mapping provides advanced geographic visualization and calculation. With our unique analytics engine, Qlik also offers the most flexible and interactive dashboards on the market, supporting free-form exploration and search that's simply not possible with querybased tools.

The Qlik Associative Engine allows near-limitless combinations of data without the challenges and limitations of using SQL joins. Qlik also provides a complete set of data preparation and integration capabilities, including graphical data preparation and robust scripting. Qlik offers an enterprise data catalog for easy access to governed data sources, a broad set of connectors to on-premises and cloud-based sources, and direct query capabilities to compliment in-memory analysis.

Enterprise Reporting

With Qlik, you can support all your information delivery needs, providing reports on a scheduled or routine basis in addition to interactive analytics. Self-service reporting allows users to subscribe to entire sheets and individual analytics for scheduled report delivery on a routine basis.

Chart monitoring is also available in the hub and mobile app for fast updates on key analytics.

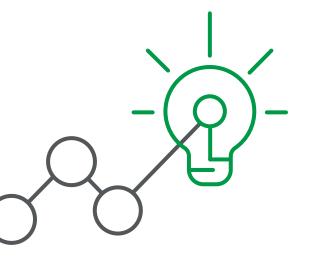
Users can manually print and export data, analytics, and stories for easy sharing.

Qlik Reporting offers centralized report distribution, enabling your organization to create, manage, and deliver reports using data and analytics from Qlik. Reports are available in PPT, PDF, and tabular formats using data from multiple Qlik apps. PPT reports include independent objects for easy authoring and annotation. Loop and reduce data with specific field values to create cycled reports for different audiences. Automate report tasks using application automation, or directly integrate with third-party systems through the Qlik Reporting API. Reports can be distributed through multiple channels including email, Amazon S3, Google Cloud Storage, Dropbox, and SharePoint.

AUGMENTED ANALYTICS

At Qlik, we believe that Al should work in combination with human intuition, not replace it. Our approach is different from "one-size-fits-all" tools or bolt-on Al — we combine our unique associative engine with Al and machine learning built into our platform at a foundational level. The result is truly integrated Augmented Analytics that deliver deeper, more meaningful insights, enhance the ability of people to interact with data, and drive efficiency and time to value.

Qlik provides automated analyses and insights and supports natural-language analytics through Insight Advisor Search, Chat, and Analysis Types. Qlik AutoML™ provides machine learning and predictive analytics specifically designed for analytics users and teams. With advanced analytics integration, you can deliver the power of data science and generative Al directly to business decision-makers, with real- time exploration.



Deeper Insight Through Al

Al helps your people understand and use data in more effective ways to find every possible edge. With combined Al and associative technology, Qlik empowers users of all skill levels to reach their full potential with data.

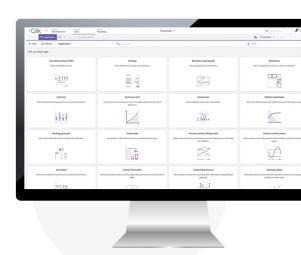
Advanced Insight Generation

Qlik delivers a full range of augmented analytics capabilities driven by our associative engine combined with AI and ML. It offers AI-generated insights, natural language interaction, automation and assistance, predictive analytics driven by AutoML, and real-time integration with leading data science and generative AI tools.

Insight Advisor allows users to request a variety of advanced analysis types, including comparison, ranking, trending, clustering, correlation, period-over-period, forecasts, and more. It will offer guidance for choosing the right data and generate data visualizations, narrative interpretations, and even entire sheets and dashboards for exploration. Qlik apps feature a robust business logic layer for customization of insight generation and natural language to align with business requirements. With unique context awareness, the resulting analytics closely align with the user's intent and respond to interactive selections.

Natural Language Analytics

Insight Advisor is your natural language assistant, supporting multiple user experiences including search-based discovery, fully conversational analytics, and natural language generation on sheets. Search-based discovery allows users to more easily generate new analyses and insights based on natural language search, extending the power of insight creation to more people. It provides auto-generated analyses and insights based on Natural Language Processing (NLP). Users can make edits and adjustments to visualizations and directly add them to dashboards for further exploration. Users also get natural language interpretations (NLG) for further context and data literacy.



Conversational Analytics enables users who aren't data experts ask questions and get answers in a natural, conversational manner, through the Qlik hub and Microsoft Teams. This allows organizations to drive adoption, spreading the power of analytics and data-driven decisions to far more people than ever before. Insight Advisor Chat provides a fully conversational, natural language interface across multiple apps. It understands user intent, delivering answers and added insight for a deeper understanding of your question.



Insights include auto-generated charts, narrative insights, key observations, and more. Users can easily interact to get answers to their follow-up questions and link directly to visual discovery, in context, for deeper analysis and insight.

Finally, users can easily add Al-generated natural language insights (NLG) to sheets and dashboards. You simply choose a chart to generate readouts and interpretations, or specify a new context for added insights. With our associative engine, insights are dynamic and update to reflect the new context (selection state) after each click.



Predictive Analytics

Qlik AutoML (automated machine learning) allows analytics users and teams to easily generate machine learning models, make predictions, and plan decisions — all within an intuitive, code-free user interface. It easily connects and profiles data, identifies key drivers in the dataset, and generates and refines models. You can then make future predictions and test what-if scenarios. Results are returned with prediction influencer data (Shapley values) at the record level, allowing you to understand why predictions were made. This is critical to making the best decisions and taking the right actions. Predictive data can be easily published into Qlik apps and models can be easily integrated for real-time exploratory analysis and what-if analysis.

With advanced analytics integration, you get real-time exploration of calculations and content from data science models within Qlik applications. Direct, engine-level data exchange with third-party data science tools through open APIs deliver new calculations as the user clicks, allowing people to refine context and test what-if scenarios. Our associative engine sends small subsets of in-context data for processing in real time, receiving calculations that are instantly visualized for the user. We offer native connectors for Amazon Sagemaker and Comprehend, Azure ML, DataRobot, Databricks, and connectivity for custom solutions built in languages such as R and Python. With this, users can interactively explore, ask new questions, and test scenarios, delivering the power of data science directly to business decision-makers.

Generative Al

Generative AI offers exciting new capabilities and potential, and with Qlik, users benefit from the same engine-driven, real-time integration with third-party models. You can do things like generate natural language insights, perform sentiment analysis, conduct few shot learning and classification, synthesize, summarize and enrich data and text, and allow users to ask questions in real time. And this is only the beginning — our customers and partners have the ability to innovate and build all kinds of new solutions using generative AI.

Questions can be constructed by app developers with prompt engineering and datasets from Qlik analytics. With our associative engine, as users refine context the engine determines applicable subsets of data and sends data tables along with questions to generative Al for processing in real time, supporting multi-record use cases like summarization and classification. Every time the user makes selections, they get new results with the most relevant, in-context insights and content from generative Al. We offer real-time connectors for OpenAl, Azure OpenAl, and a number of Amazon Bedrock foundation models.

Take Intelligent Action

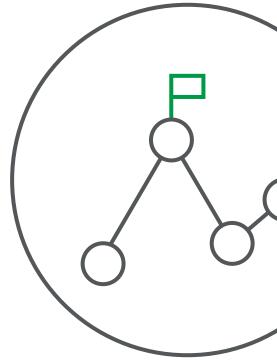
Qlik's vision is a state of continuous intelligence, in which the flow of data across an organization drives the best decisions and actions in real time. For BI and analytics, this means taking people beyond the dashboard, with action-oriented capabilities that deliver the right insight at the time and place of decision. Action-oriented capabilities include intelligent alerting, application automation, collaboration, mobility, embedded analytics, and more. Of course, this needs to be supported by an intelligent analytics data pipeline that can deliver a continuous flow of up-to-date data from all your data sources.

Open Platform

Qlik provides a complete set of open and standard APIs, allowing organizations to embed analytics in operational apps and create mashups and external applications. Unlike other solutions, you can create fully custom apps with live objects embedded in workflows in addition to just mashups. You can embed all augmented analytics capabilities including analysis types, search, conversation, and business logic. Embedded analytics are fully interactive, driven by our associative engine, uniquely staying in context together as the user explores and updating at the speed of thought. Fully interactive embedded analytics deliver the power of your data directly where and how people work, and extend analytics to the broader ecosystem of customers and partners.

Organizations can also build, integrate, and extend analytics to leverage functionality and deliver insight and context from third-party tools and technologies. Qlik easily supports the creation of custom analytics and

extensions, either custom-developed or leveraging third-party tools and technologies, that work seamlessly with our associative engine.



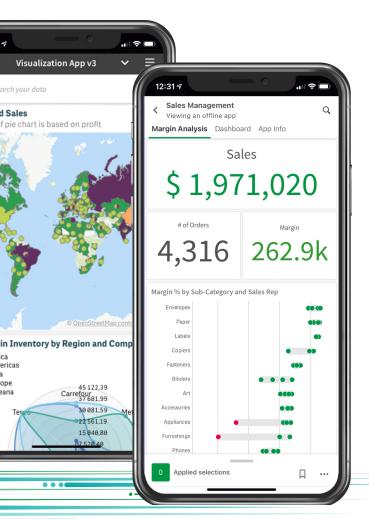
Collaboration

When making decisions, it's critical to capture and share the context you need to accurately inform decisions from your data, people, and other systems. Collaborative notes allow users to capture and harness the critical human context needed for the best business outcomes, both individually and in teams. People can add narrative to analytics and drive discussions to interact with others around data. Collaborative notes are independent artifacts that can include multiple analytics and serve as an independent record for decisions.

In addition, interactive data storytelling facilitates live meetings and presentations. Users can create slides with analytics and insights, in a linear story, with graphical content and text commentary. With direct, incontext linking to analytics apps, users can dive directly into live analytics for immediate answers to follow-up questions as they arise in discussion.

Fully Interactive Mobility

To deliver analytics and insights at the time and place of decision, you must go beyond the dashboard to where and how people work. Qlik is inherently mobile, built from the ground up to run on any device with complete capabilities and no compromises.



Qlik Sense Mobile is our native app for iOS and Android that provides an enhanced user experience, fully interactive online and offline analysis, and integrated push alerting to drive action at the point of decision. It delivers Qlik analytics in the best form for mobile consumption, such as a single object mode for navigation, an intuitive selections bar, and a mobile collection in the hub. With the Qlik Associative Engine running on-device, it uniquely supports fully interactive online and offline exploration, allowing mobile workers to answer unanticipated questions in any environment. It also features integrated alerting with push notification so users can be notified of important changes in their data and respond in real time.

We also offer a smart, responsive, web-based client in mobile browsers. Whether a device is large or small, touch or keyboard-based, using native apps or the web, Qlik delivers the best user experience — intelligently adjusting layout, information, and functionality for the device at hand.

Alerting and Automation

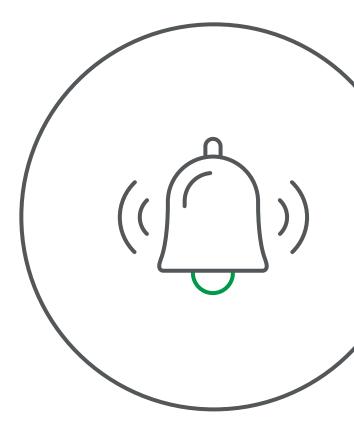
Qlik is built to drive action based on changing data, helping you capture the moment by triggering action when it is needed. This includes both human action and automated events, all driven by a real-time data pipeline.

To prompt human action, Qlik delivers powerful, data-driven alerts with sophisticated alert criteria, notifying users of potential issues and allowing them to immediately take action. Intelligent data alerting notifies users of changes, trends, and outliers in data, through statistical evaluation of new data against thresholds, comparisons between measures, condition and/or logic, and the ability to trigger alerts based on individual dimension values. Qlik supports both self-service and centralized alerting, and alerts can be delivered through customizable emails, our web interface, and mobile push notifications on the Qlik Sense mobile app. With alerting, more people can proactively monitor their business, spot trends and outliers, and take timely action based on changing data.

In addition, you can trigger automated events and workflows in Qlik and downstream applications based on changing data. Using application automation, Qlik users can build workflows that trigger event-driven actions through a visual, no-code environment. Automations can be triggered without human intervention

— simply based on changing data. Connectors are available to access a broad array of cloud applications in addition to Qlik analytics. With application automation, organizations can trigger action in Qlik and downstream systems without the need for human involvement.

Both of these action-oriented capabilities can be driven by Qlik's robust data integration platform, featuring real-time data updates driven by unique change data capture technology. Qlik Data Integration moves data in real-time from sources into Qlik data repositories, includes robust data transformation and quality, and is managed through a simple graphical interface that completely automates the data pipeline. This means your Qlik analytics applications are always up-to-date, and you can realize the value of analytics on data in motion as well as data at rest.



High Performance, Governed, Independent

As the only independent, end-to-end data and analytics platform, Qlik Cloud supports organizations of all sizes with unmatched performance and flexibility while freeing them from the constraints of cloud mega-vendors. It features full enterprise SaaS deployment, built on a modern, containerized architecture with hybrid deployment options available for your data and analytics. At Qlik, we do not limit customers to any particular cloud; instead, we support support combinations of public, private cloud, and onpremises sites as needed.

Your organization can deploy modern analytics, including self-service, without having to make trade-offs when it comes to governance and trust. Qlik Cloud features a modern hub with governed content areas that allow people to easily find and share analytics. Our modern management capabilities provide a single point of control for all areas of the system. Flexible security and dynamic data reduction ensure that information is accurate and secure. Finally, our unique analytics engine delivers unmatched flexibility and calculation speed when scaled to high numbers of users and large, complex datasets. Your organization gets the performance and governance it needs to maximize adoption and value.

Qlik Data Integration

Also delivered on our platform, Qlik Data Integration offers a real-time data pipeline based on unique change data capture (CDC) technology that identifies and moves only the changes in source datasets as they occur. Not putting stress on source systems supports analytics on data in motion. Changes in data can be flowed directly into Qlik data files (.QVD) and made immediately available for analytics.

For more information, please visit allk.com



About Qlik

Qlik transforms complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio leverages advanced, enterprise-grade Al/ML, and pervasive data quality. We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive and real-time analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our Al/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

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