

Oracle Analytics

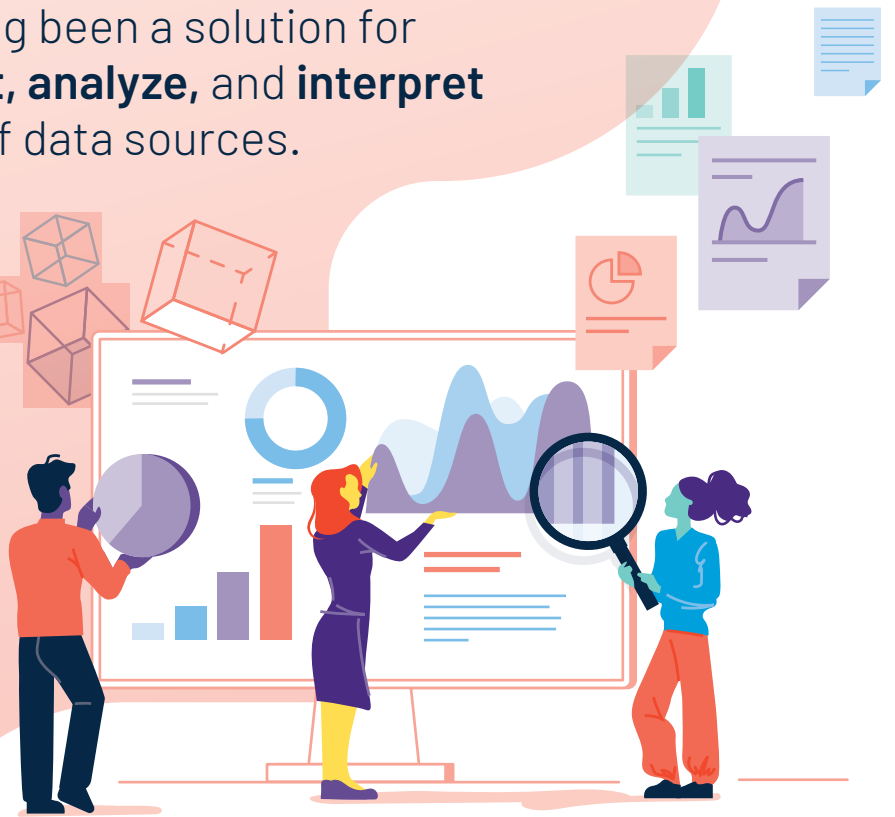


Introduction

Business intelligence has long been a solution for companies looking to **collect, analyze, and interpret** data coming from a variety of data sources.

The combination of business intelligence technology and strategy allows businesses to fully understand their historical data, report out on the state of the present, and forecast and **predict future business outcomes**.

These capabilities are an essential business requirement and a critical component of every company's digital transformation. Business intelligence enhanced with intelligent, augmented analytics features and cloud deployments can drive that transformation even faster by empowering the business with data-driven insights.



As business intelligence continues to evolve into broader analytics platforms infused with augmented capabilities, it empowers users to predict where their company is headed and drive revenue and profitability by automating the delivery of actionable insights. This is accomplished through the use of predictive analytics, machine learning, natural language processing (NLP), and natural language generation (NLG), among other intelligent features. The NLG capabilities embedded in these solutions power the delivery of those automated insights in the form of easy-to-understand descriptions of trends and data sets, as well as summaries of information in natural language.

Not only do these advanced features provide **previously undiscovered insights**, they offer relief to organizations that are not able to hire large teams of data analysts through true self-service functionality delivered by natural language. By embracing augmented analytics, businesses are able to leverage their data like never before.



The Evolution of Analytics: Business Intelligence to Augmented Analytics

Business Intelligence:

- Largely on-premises deployments
- Manual data analysis to pull out insights
- Manual data preparation, cleaning, discovery
- Reporting and data visualizations for understanding and interpreting data
- Often requires the help of IT to provide data extracts in spreadsheets or pre designed reports

Intelligent, Augmented Analytics:

- Often cloud or hybrid deployments
- Data enrichment services (preparation, cleaning, blending, labeling, etc.) provided by machine learning
- Self-service, automated chart recommendations for visualizations
- Self-service point-and-click visual exploration, drag-and-drop features, and no need for IT assistance to pull critical data
- Natural language or voice queries for quick analysis
- Recommended fields, columns, data sets, and visualizations that draw attention to insight
- Predictive analytics to suggest future outcomes and indicate where the company is headed
- Automated insights proactively provided to users and stakeholders via NLG
- Proactive mobile insights



Business Intelligence: Theory vs. Practice

Business intelligence solutions have traditionally catered to different personas across business functions. Companies generally rely on their IT or development teams to help build out the supporting technology and data infrastructure, alongside the integrations required by their business intelligence platform. Once organized properly, that data is then built into data visualization dashboards that are distributed throughout the business. These dashboards may be accessible to the business end user; however, they often lack true self-service functionality to allow those end users to explore and analyze the data for deeper understanding and actionable insights. In theory, business intelligence software allows end users to understand and act on their data. In practice, it provides an effective way to visualize reports and track specific metrics.

Most business intelligence solutions are built for power users and data analysts, not the business end user. Typically, they are developed for (and delivered at) a departmental level inhibiting company-wide data access that limits the end user's ability to find cross-functional, business-critical insights. Some common end user use cases of traditional business intelligence tools are employees in finance operations that need to track cash flow and expenses, sales managers forecasting revenue, or customer service professionals tracking tickets and agent performance. However, without simple self-service capabilities for data exploration and analysis, are these end users actually able to take advantage of the data and tools provided to them?



Average User Adoption in
G2's Summer 2019 Grid® Report for
Business Intelligence Platforms

IT Departments

Build back end of the business intelligence platforms; help connect data sources, both internally and externally



Business End User

Self-service access to company wide data and analytics is not often available for business end users



Executives and C Suite

Track and visualize key performance metrics



User Statements about Current State of BI

- The benefit to BI is that it saves me time from having to manually crunch the numbers.

User in real estate



- It's giving me the ability to see my data, which helps me understand where I am in relation to my goals and sales numbers.

User in information technology and services



- Visualizations and reporting for client data.

User in information technology and services



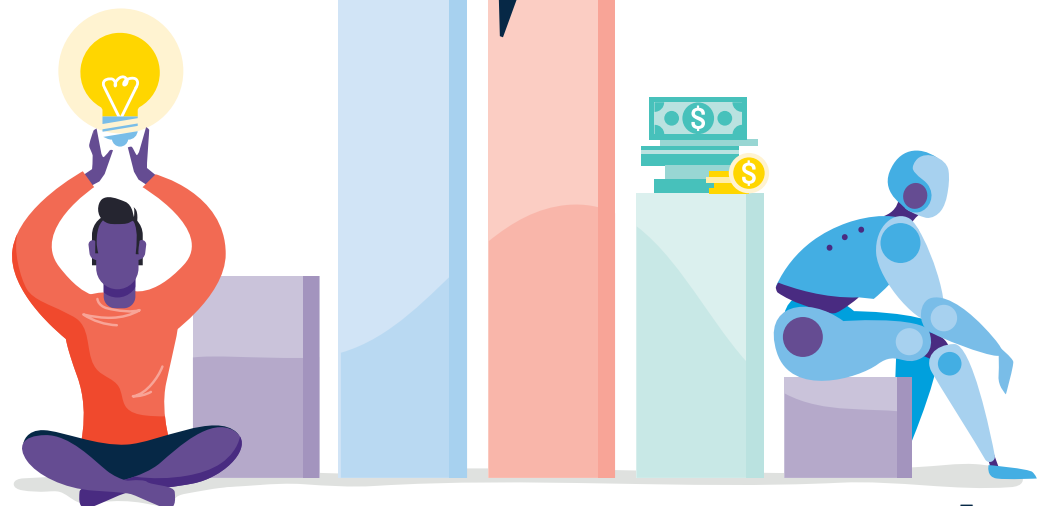
- We use it for our AE [Account Executive] dashboard where we can see where we stand with sales.

User in marketing and advertising



- Really great visualizations that can be easily understood by everyone in the company.

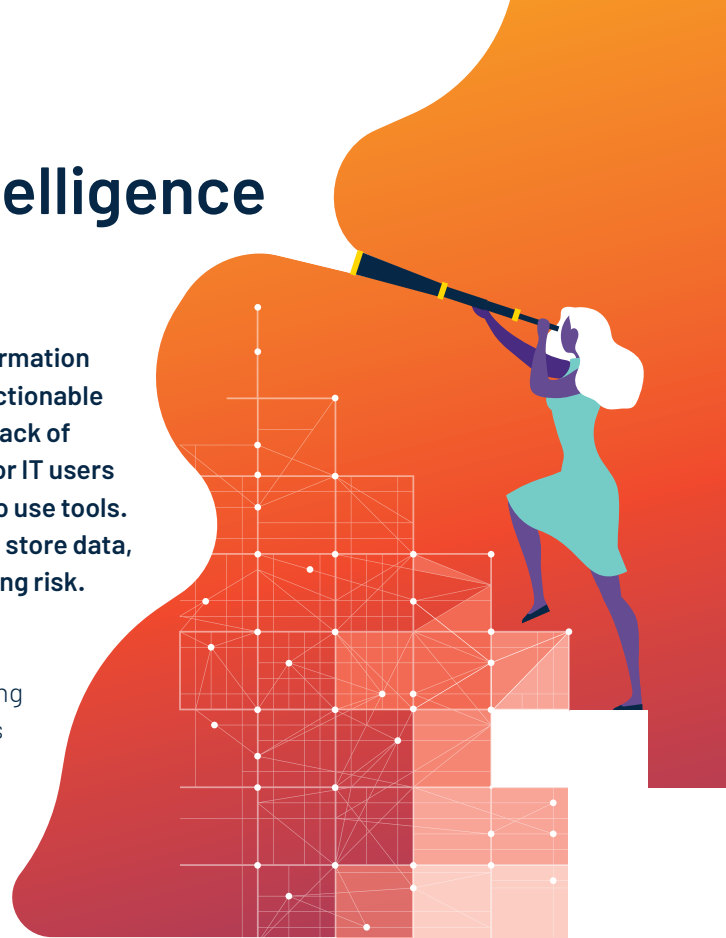
User in research



The Shift from Business Intelligence to Augmented Analytics

To overcome business intelligence roadblocks on the digital transformation journey, businesses and analytics vendors alike have realized that actionable insights need to be proactively delivered and easy to consume. The lack of business intelligence user adoption is often attributed to the need for IT users to go around the platform and utilize spreadsheets or other, easier to use tools. Without a true self-service solution, end users are forced to pull and store data, and conduct analysis off-platform impacting governance and creating risk.

By leveraging predictive analytics and machine learning, augmented analytics products can perform automated data exploration, providing previously hidden insights. These primarily cloud-deployed solutions offer faster and easier setup to help create a single platform for data analysis, paired with intelligent search and data discovery capabilities that empower users to find the information and insights they need, when they need it.



Oracle Analytics Cloud User Statements:

Oracle Analytics Cloud provides the industry's most comprehensive cloud analytics in a single unified platform, including everything from self-service visualization and powerful inline data preparation to enterprise reporting, advanced analytics, and self-learning analytics that deliver proactive insights.

 Consultant in computer software

Sleek UI, availability of many target app adapters, easy to integrate new data sources, pairs up to Tableau.

 Consultant in management consulting

No need to worry about infrastructure upgrades; it is up in minutes.

 Consultant

Analyze business-critical problems; [Oracle] is helping in our digital transformation journey.

 Consultant

I like the machine learning piece to get new insights to my data.

 Administrator

Oracle autonomous analytics leverage cloud-based visualization, predictive analytics, and machine learning to uncover hidden business insights.

 Technical project leader, IT

It's the one single platform to bring data from all sources and provide not just analytics and data visualization, but also capabilities for conducting predictive analytics and machine learning.

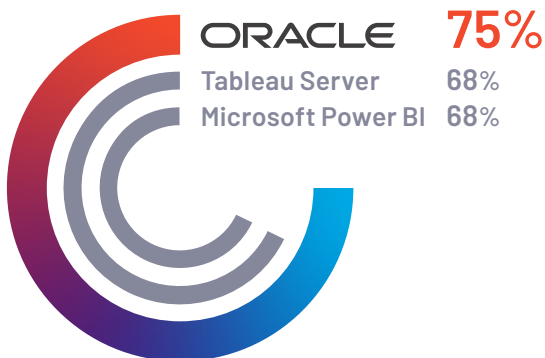
 Consultant



Oracle Predictive Analytics vs. Microsoft vs. Tableau



Predictive Analytics Feature Satisfaction Per G2 Reviewers



➤ Oracle Analytics is very easy to get going—it took me less than 10 minutes to start up. The ability to connect any data easily is awesome. I like the new machine learning features, too.



Consultant

➤ It is very powerful and easy to use. It provides excellent analytic capability and great customization options.



Executive Sponsor in Mechanical or Industrial Engineering

➤ [Oracle] It allows you to see and manipulate various data to answer questions about your business. The predictive analysis feature is especially nice.



Associate attorney, law practice industry

➤ OAC [Oracle Analytics Cloud] is literally changing the way we do business. Information is viewed earlier by management, and they can react quicker when needed.



Administrator



The Need for Big Data Services

Along with predictive analytics, the ability to ingest, clean, and visualize both structured data and unstructured big data sources is critical. By connecting with big data sources such as those that leverage Hadoop, users can analyze unstructured data like text, videos, and image data sets, among others. This enables businesses to monitor and dig insights out of nontraditional data sets—like social media posts, emails, or IoT sensors, to name a few—that provide streaming data.



Big Data Feature Satisfaction per G2 Reviewers

ORACLE



Tableau Server

76%

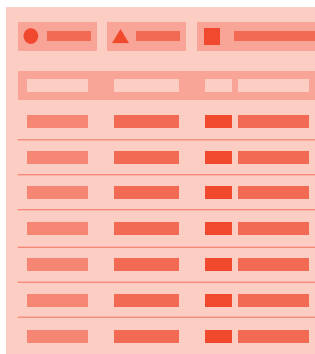
Microsoft Power BI

73%

Structured vs. Unstructured

Structured data fits within the columns and rows of a database, while unstructured data does not fit into traditional database fields, instead requiring big data processing and distribution solutions (e.g., Hadoop).

Structured data



Database, CRM, ERP

Unstructured data



Text, audio, videos

What do you like best?

- ▶ [Oracle] Big data capability, all-in-one solution, in-memory analytics capability.



Office manager, electrical manufacturing industry



Key Differentiators: Intelligent Features

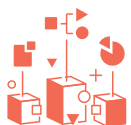
Oracle Analytics Cloud leverages AI and machine learning to provide a number of intelligent features, differentiating it from traditional business intelligence solutions and embracing the augmented analytics of the future.



Intelligent search. Seamless search with natural language queries, offering the ability to search all aggregated data sources while providing the most relevant visualizations based on the search.



Smart data discovery. Automatically analyze and generate explanations of data, including key drivers of the results



Smart data preparation. Augments, enhances, heals, and creates richer data that can lead to improved business insights and sharper understanding.



Natural language. Provides a truly self-service experience, where users can search in written text or via speech using NLP and Oracle Analytics Cloud will provide analytical insights in plain, written language with the help of NLG.



Mobile capabilities. A combination of speech or natural language search capabilities and proactive notifications for data changes or the availability of new data sets, all to discover new insights on the go.

Learn More:
oracle.com/analytics

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