Collibra

Leveraging cloud to scale trusted analytics

Powered by: Google BigQuery · tableau · Collibra
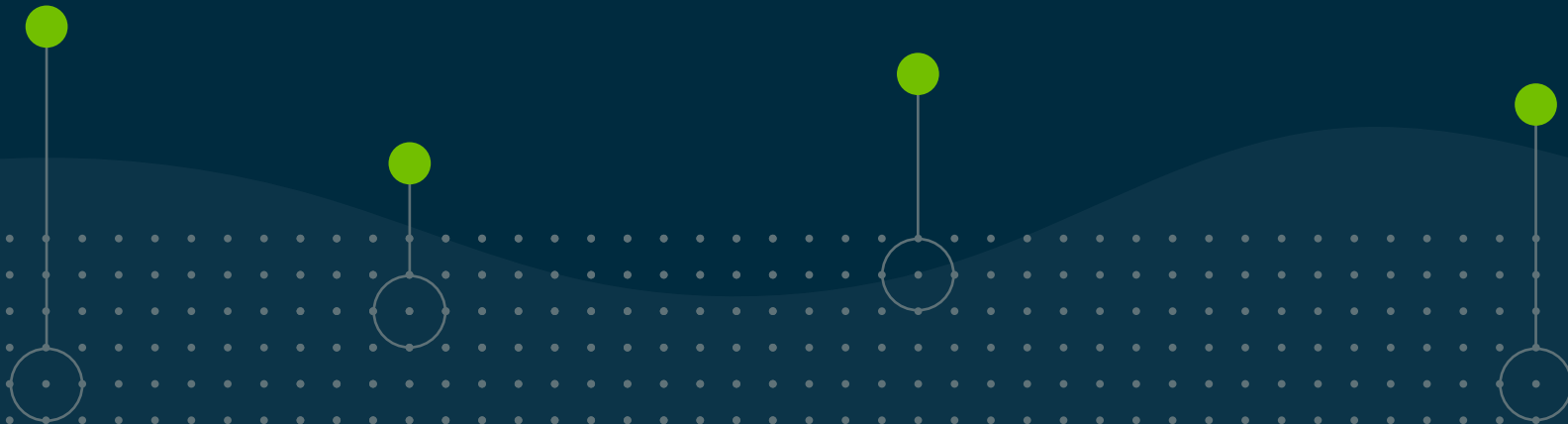
The digital imperative

Organizations across the globe face common challenges. They urgently need to execute digital transformation programs to stay competitive and drive innovation. But they do not always know how best to go about that.

Digital technology is transforming every walk of life – from smart cities and self-driving vehicles through to smart agriculture.

It is impacting every industry vertical – from traditional financial services through to retail, healthcare, manufacturing and power utilities.

Even though digital transformation can mean something unique to each organization, there is invariably one thread in common – **data**.

The importance of data

Data runs through the heart of every digital transformation project.

It helps organizations:

- **Better understand their customers.**
  To know what they need, when they need it and how much they can afford.

- **Improve products and services.**
  Ensuring they are well-crafted and tailored to market requirements.

- **Transform their operations.**
  Increasing efficiency, maximizing value from IT investments and managing risks better.

80%

of the participants believe data and analytics governance is important in enabling business outcomes. Yet, from the same survey, we know that four in ten participating organizations do not assess, monitor or measure data governance.

Gartner's Data & Analytics Governance Survey, June '19

How are data-driven champions releasing value from data?

77% are using data across their organization to reimagine products and services.

60% are using data as a business case to reduce internal reporting and operational costs.

Accenture - Closing the Data-Value Gap, August '19

The technical challenge

While organizations recognize the importance of data in driving their digital transformation efforts, many are encumbered by technical debt.

Their data infrastructures may be too cumbersome, expensive to maintain and lack the required scalability and performance.

Equally, there is often too little visibility in the way data flows through an enterprise, making it hard to find the right source, ascertain data quality or mitigate risks from change management.

"Only 16% of companies in our survey indicated having an agile data supply chain enabling them to serve data to the business at speed. Fifty five percent of companies have a mostly manual approach to discovering data within their enterprise, and only 28 percent have a strategy in place to take advantage of analytics tools and infrastructure throughout the enterprise."

Accenture - Closing the Data-Value Gap, August '19

"We started with many disparate systems that were poorly integrated. Knowledge about how data flowed through those systems was tied up with individuals. We purchased Collibra to solve that problem. It was a fantastic solution for us, enabling us to track source, lineage and classification of data in a central location as opposed to disparate repositories."

Chris Fergusson
Data management analyst at ATB Financial

BigQuery, Tableau and Collibra

Google BigQuery, Tableau and Collibra deliver an analytics stack to help drive digital transformation initiatives. The combination of these cloud native platforms ensures organizations can cut through siloed architectures, nurture data and information assets, and derive powerful new insights into their business.

![Google Big Query logo] Google BigQuery is a fully managed cloud data warehouse that offers unparalleled scalability, at blazing-fast speeds, with zero operational overhead.

![tableau logo] Tableau delivers an analytics platform to visualize data, communicate key findings and ensure analysis can be easily understood.

![Collibra logo] Collibra enables organizations to drive Data Intelligence, ensuring enterprise information is well-governed to foster trust and mitigate risk, and serving as a single pane of glass to facilitate discovery, understanding and collaboration around enterprise data assets.

"Our best in class data warehouse [built on Google BigQuery] now offers some of the best cost and performance in the industry. We have used Google's APIs to provide integration with Collibra, which houses our metadata and security classifications for data throughout all our systems as it flows across the company (not just our BigQuery environment). That combination offers a rapid deployment solution for our analysts so they can explore the data, more or less on demand."

Chris Fergusson
Data management analyst at ATB Financial

Google
Big Query

Google Cloud's data warehouse solution BigQuery is ideally suited for scalable enterprise analytics. Its distributed architecture, with the separation of compute and storage, supports high availability and query performance. A range of automated tools make it easy to load and pre-process data, while its powerful analytical capabilities ensure data can quickly be queried into business insights.
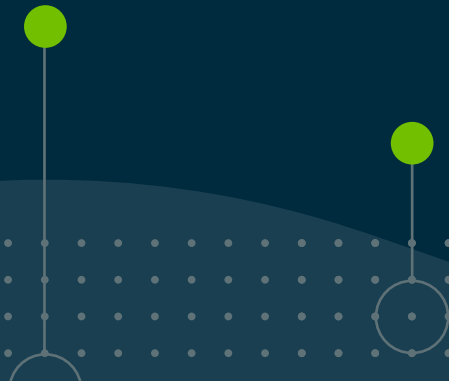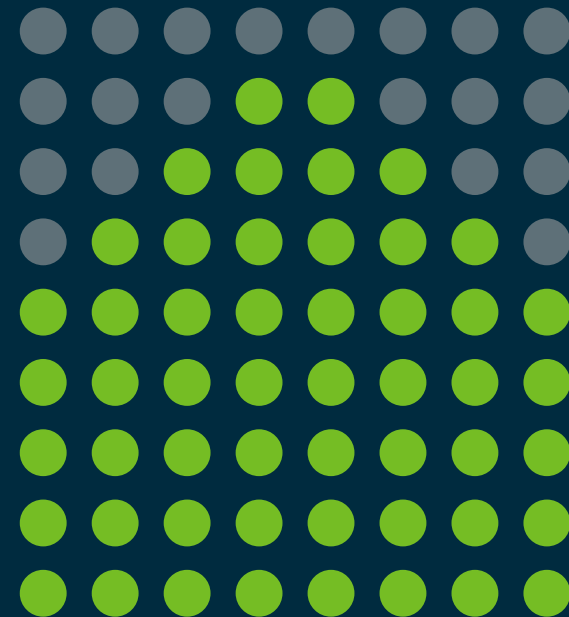
Tableau helps users see and understand data.

The Tableau platform provides the breadth and depth of capabilities that enterprises need, and seamlessly fits into your organization's analytic strategy. Tableau helps organizations become more data-driven through its industry-leading analytics platform.

- **Intuitive and powerful analytics that people love to use.**
  Explore and analyze data by using visuals and natural language, and answer pressing questions with just a drag and a drop.

- **An integrated platform that is easier to start and scale.**
  Tableau is designed to fit -- not dictate -- your data strategy, and adapts to your environment with unmatched flexibility and choice.

- **Bring data to the center of every conversation.**
  Tableau provides the flexibility to interact with your data in any way you'd like – via the desktop, the browser, a mobile device, or even embedded into other applications.
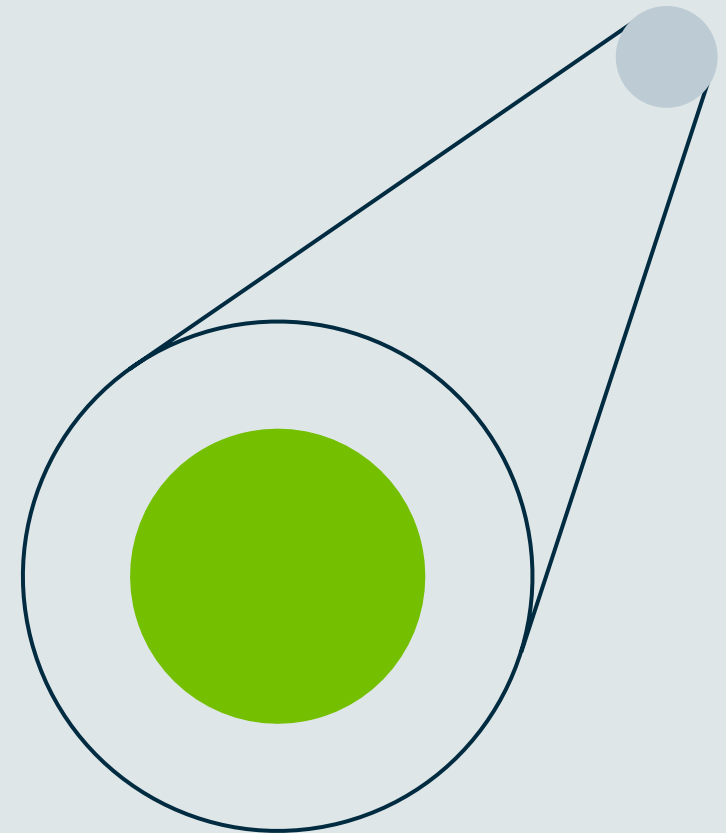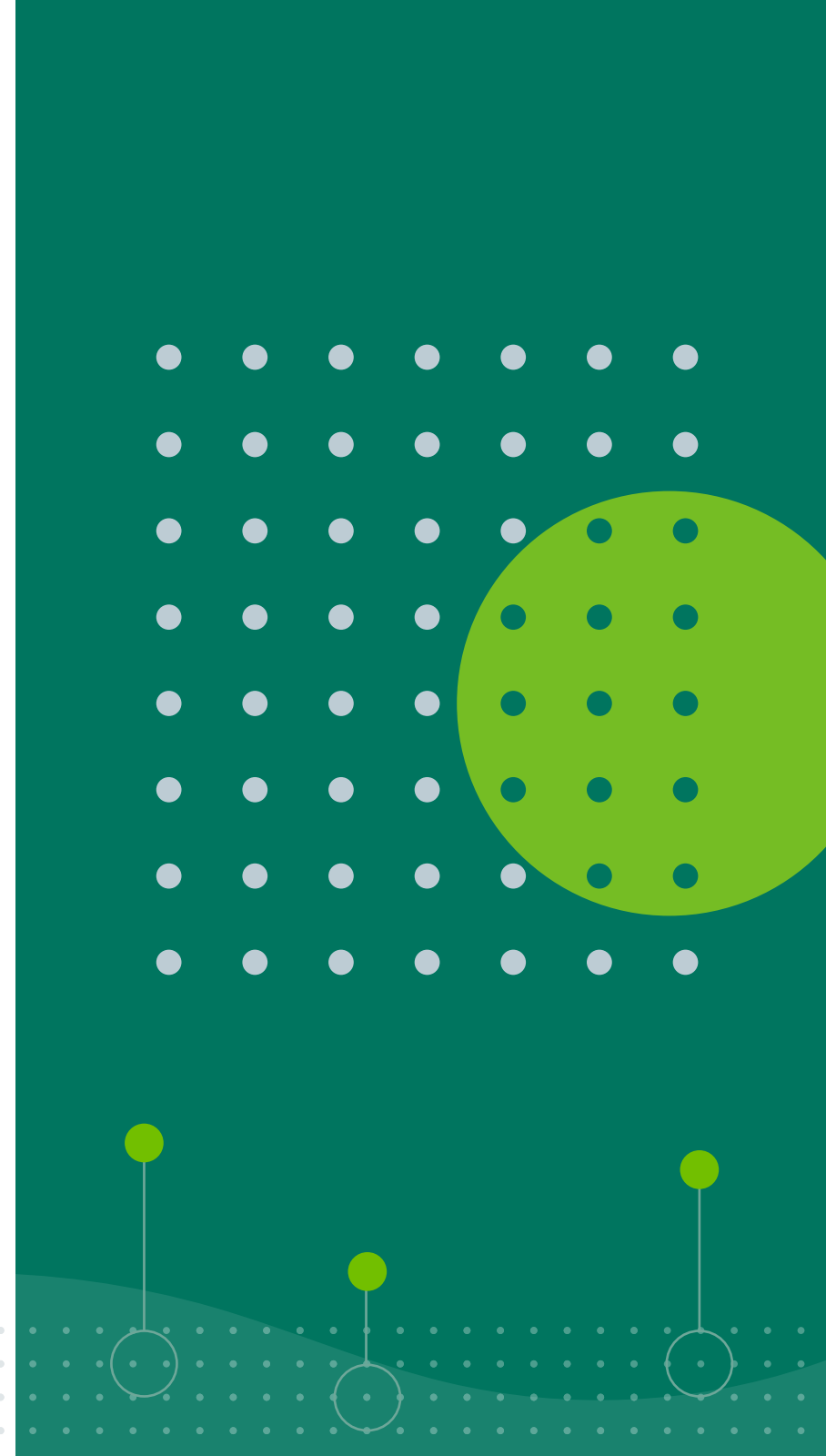
Collibra

The Collibra Data Intelligence Cloud empowers organizations to make the most of their data. It does this by:

- Driving trust in data by enhancing consistency, enforcing certification and demonstrating provenance

- Aiding analysis of data by easing discovery, providing context and tracking lineage

- Supporting collaboration by offering a unified view of enterprise data, reports and dashboards, and capturing tribal knowledge by collating user feedback and expert insights

Enabling agile data operations

BigQuery, Tableau and Collibra foster agile data operations and help to accelerate time to insights.

- Data collection and processing services include automated profiling to harvest metadata, as well as orchestration of data pipelines to support self-service business intelligence.

- An integrated suite of analytics - including built-in machine learning capabilities, geospatial and real-time analytics – enables business analysts to rapidly derive new insights.

- User-friendly tools to create dashboards and reports, helping to ensure insights are clearly displayed and understood.

Cloud-first strategy to support self-service analytics

BigQuery, Tableau and Collibra offer a combined cloud-native solution, providing several advantages to help organizations in their digital transformation efforts:

Scalable

Aggregate data from across the enterprise to cut through business silos. De-coupled storage and compute for powerful analytics. Scalable concurrent use to support distributed teams of data scientists and business analysts.

Agile

Zero operational overhead and full range of automation. On-demand access to all the tools needed to drive Data Intelligence and accelerate business insights.

Cost effective

Zero capital expenditure. Simple implementation and easy-to-use. Streamlined support with continuous upgrades and fixes.

Delivering an integrated solution

BigQuery, Tableau and Collibra provide fully integrated solutions that help turn data into trusted insights that make a positive business impact.

Examples, of integrated capabilities include:

- **Trusted business reporting.**
  Ensure consistent understanding of terms and metrics, document data owners and stewards, identify critical data elements and authoritative data sources, and enable certification of reports to eliminate report redundancies in Tableau and increase the reusability of data in BigQuery.

- **Capture and curate metadata.**
  Data ingested into Google BigQuery can be automatically profiled by Collibra to capture key metadata, including metrics to gauge its accuracy, consistency and completeness. This information can be supplemented with qualitative insights from data experts and feedback from data consumers.

- **Automate technical lineage.**
  Track the full lifecycle of data, from source through to consumption (whether they be BigQuery models or Tableau reports). Manage the impact of change by automatically detecting how changes in source data impact downstream consumers.

- **Collaborate more effectively.**
  Register Tableau reports and BigQuery metadata in Collibra Data Catalog to share insights across the enterprise. Gather feedback to ensure the best data, tools and reports are highlighted. Allow data sets in BigQuery to be cataloged and shared.

- **Mitigate risk of data misuse.**
  Collibra enables privacy by design throughout an organization's business intelligence infrastructure. Classification of data at the columnar level enables granular control of any sensitive information stored within BigQuery. Users' access to data can be determined by specific roles and privileges, with any uncategorized data remaining masked to prevent potential unauthorized access.

"Instead of having users get access to systems based on their request, we wanted a data lake where all employees had access, but their access was controlled and limited by their role. [With Collibra and BigQuery], data is categorized at the columnar level so we can trust that people will not have access to anything that is either sensitive (based on their role) or that hasn't been categorized yet. It is fail safe. If our data governance team has not categorized the data then it does not get exposed, making it a very safe environment for sensitive data."

- Warren Whale, data governance manager at ATB Financial

Learn more about ATB Financial's migration to BigQuery, read their full story here

Conclusion

Achieving digital transformation is key to staying ahead of competitors and driving innovation. Data is at the center of digital transformation and is a crucial element to making informed business decisions. Data helps organizations better understand their customers, improve products and services, and transform their operations. Luckily, BigQuery, Tableau and Collibra can help with this journey to achieving digital transformation. Together, these combined cloud native platforms enable organizations to cut through siloed architectures, nurture data and information assets, and derive powerful new insights into an organization's business.

If you are interested in learning more, please visit collibra.com.