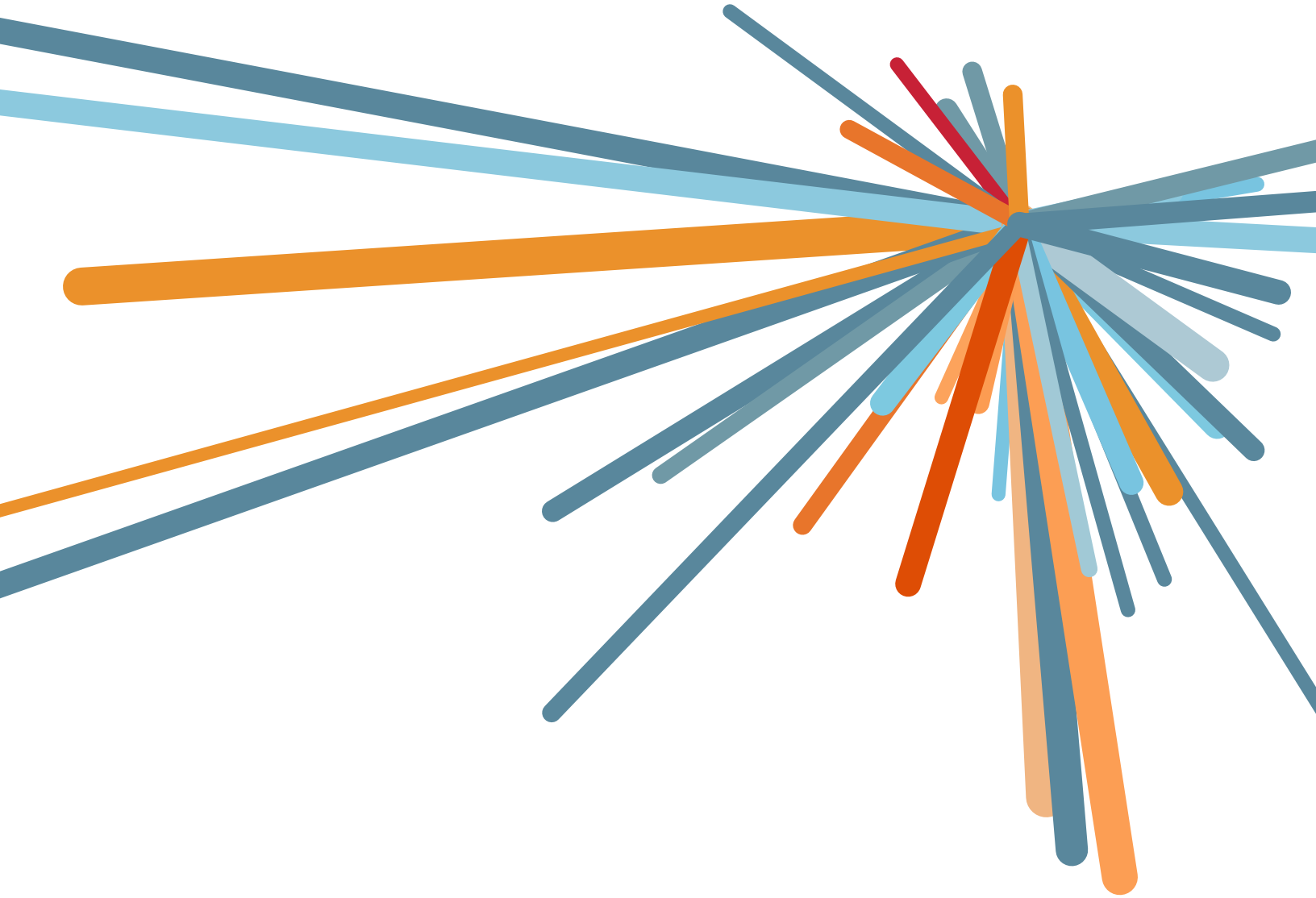


Bob Middleton, Product Marketing Manager

Business Intelligence Reporting – For SAP

"Once implemented, ERP systems soak up vast volumes of transactional data concerning many aspects of the business. That data can be invaluable when used to inform management decisions. While the data may be there, managers often find it hard to find the data they need, or find that it is not in a form that is easily consumable. Aberdeen's research indicates that this is especially true for customers using SAP solutions."

—Aberdeen Group,
Analyst Insight, June 2012

Business Reporting for SAP

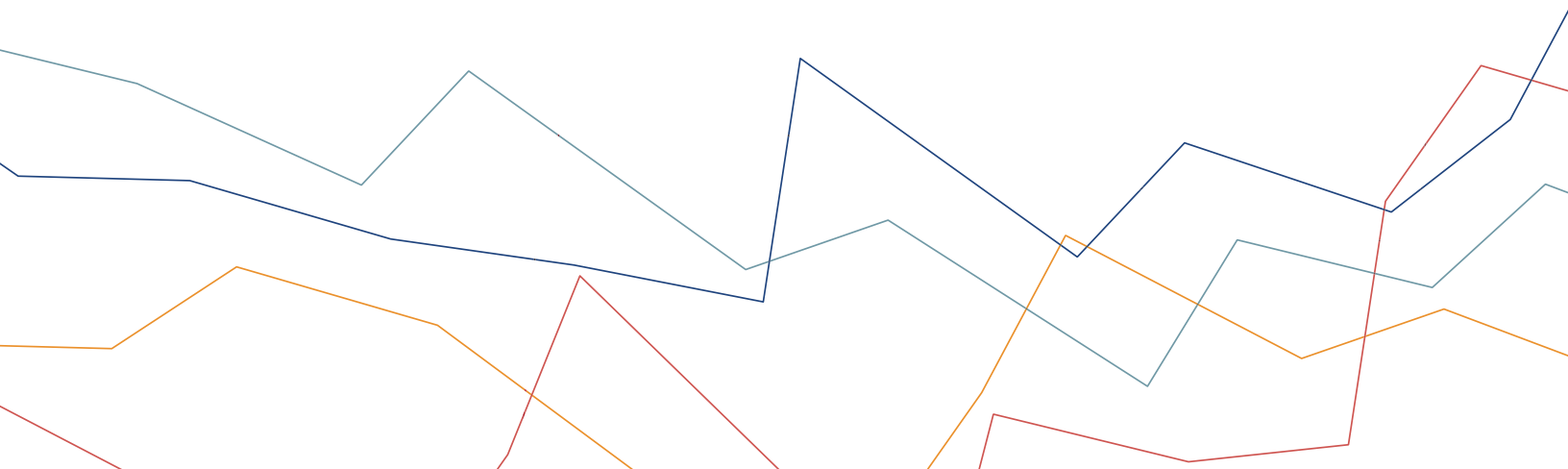
If your company has implemented SAP, then you are probably in one of several situations:

- SAP is fully implemented. Users are engaged and a lot of data is flowing into the system. Business reports are being created, but the process may take too long.
- You implemented SAP some time ago, but it failed to drive company-wide adoption. Many users complained about the system and most have gone back to using legacy solutions to bypass the SAP system when they can.
- The project is running in a few departments with no sign of it spreading any further. Adoption is concentrated in the departments that advocated for and funded the project. Project expectations were never fully met, but nobody remembers ever writing down those expectations in the beginning.
- The system has been in place for years. All company data is stored in the system. A number of standard business reports are generated at set times and sent to the distribution list. There is a wealth of data in SAP, but it's hard to get to. Very few departments or individuals can leverage the full system.

One way to get more value from your SAP implementation is to empower more people to analyze the data. SAP typically holds critical business data that can drive better decision-making—if people can get to the data and have the means to ask and answer questions.

Many companies already use Tableau Software to infuse life into their ERP systems. Tableau allows people to connect directly to SAP and see and understand the insights within. This connection allows users to interact with their data for the first time, and can vastly improve SAP adoption.

Table of Contents

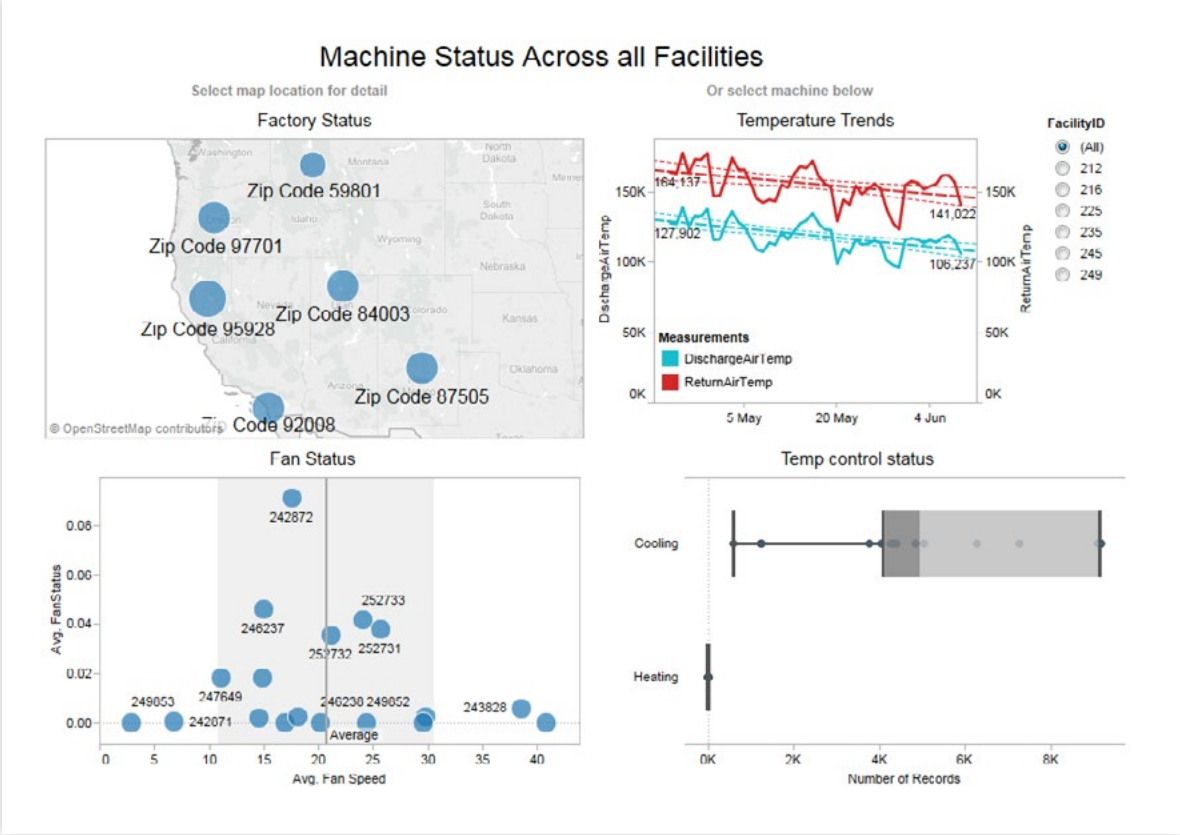


How Analytics Opens Up the Value of SAP Data

Manufacturing Use Case

Manufacturing involves a large number of steps, components, and sub-assemblies that can affect quality and timeliness of the finished product. With Tableau, organizations can track every measurable element to ensure speed and consistency.

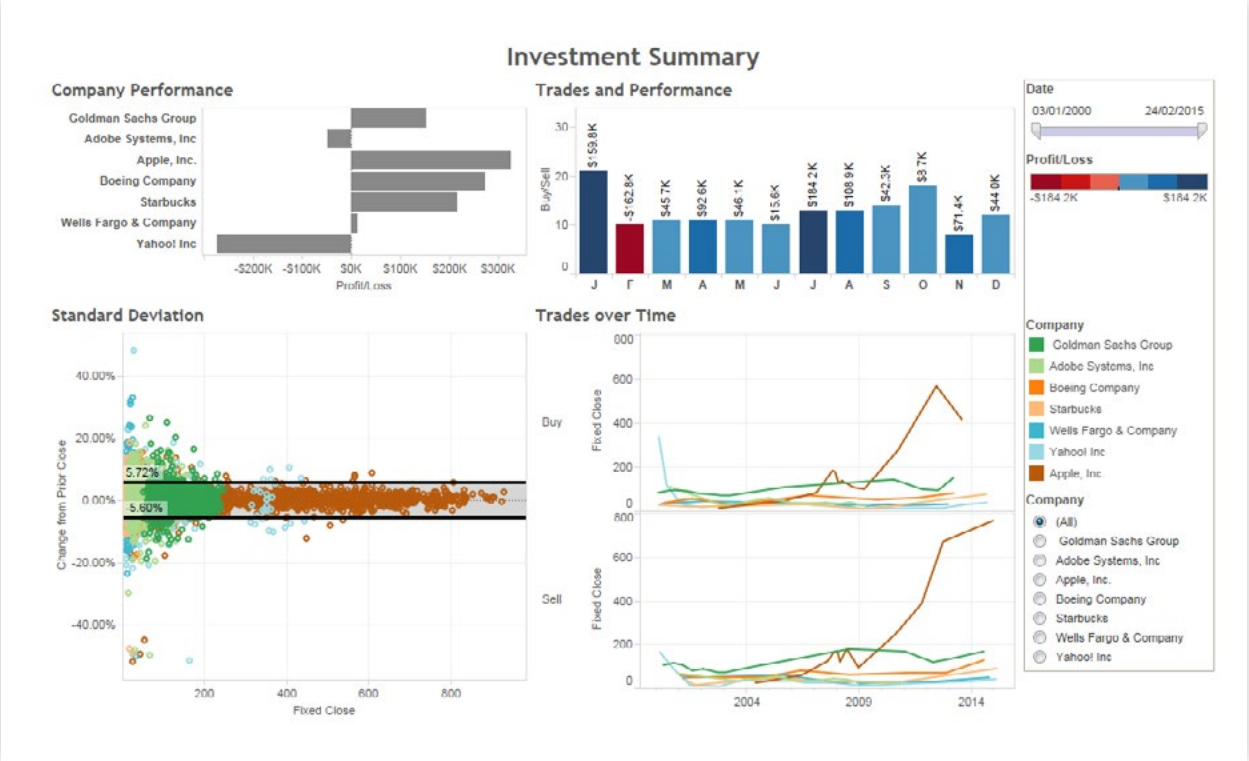
What's more, a real-time dashboard automatically refreshes to show the latest data every time it is opened. There is no need to make manual queries of the SAP system.



Investment Banking Use Case

Juggling the parameters in investment banking can be difficult, especially when the data is presented as a table of numbers. Tableau allows those tables to be turned into insights 10 to 100 times faster than manual queries. In the example below, returns are clearly seen by industry, risk level, company size, and top-performing individual shares.

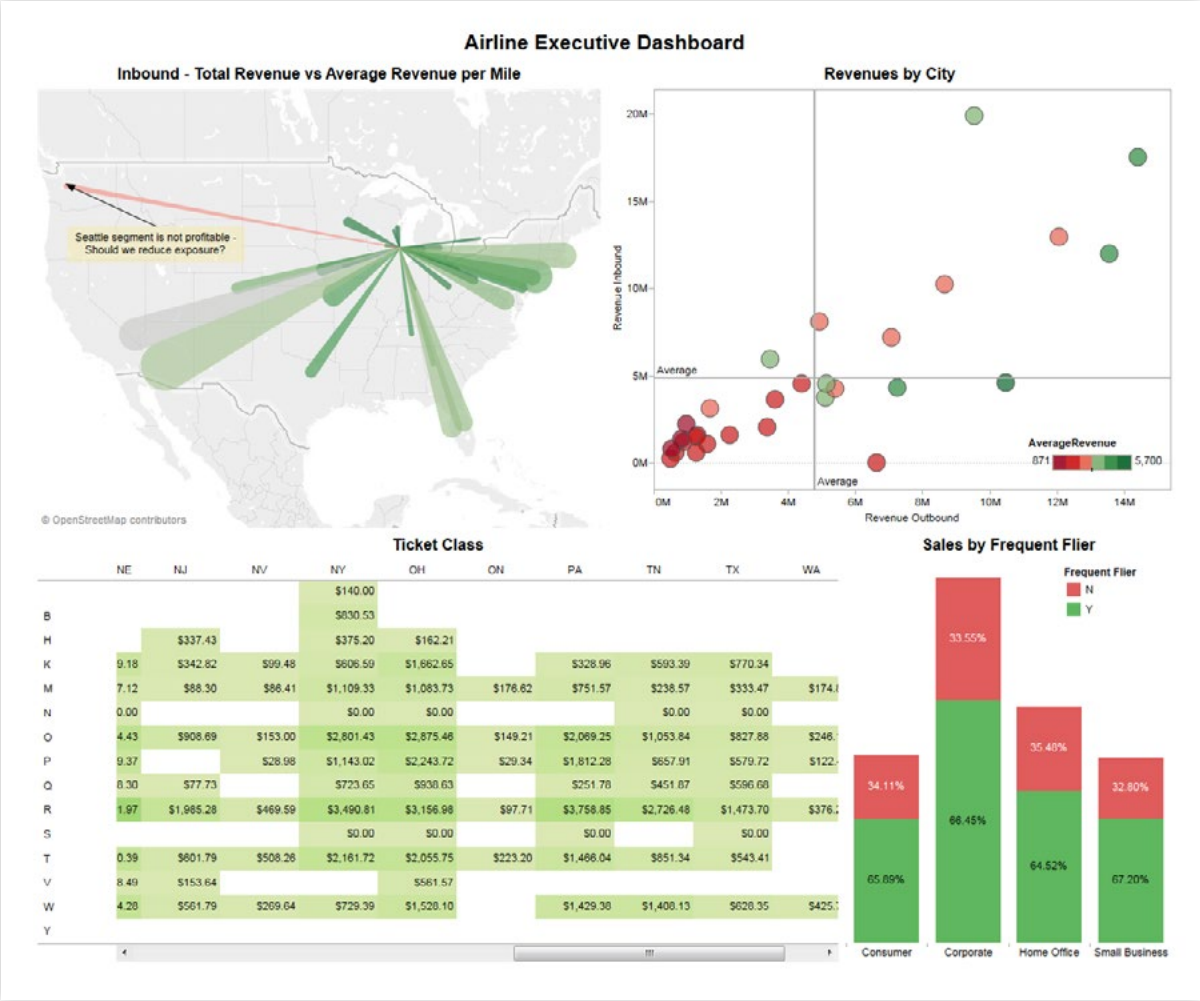
Imagine being able to select those lower outliers on a scatter plot, drill down into the underlying data, and investigate the reasons behind the losses. With that kind of insight, you'd be well-positioned to implement safeguards to prevent future losses.



Transport & Logistics

Every type of transportation organization has its own issues and constraints. An airline has to manage the flow of people and cargo while maintaining customer satisfaction. The example below provides a real-time view of flight delays, route profitability, frequent fliers by type, and jet fuel costs compared to other equities.

This mix of broad and deep analysis helps identify opportunities and threats, and also highlights trends—all insights that can lead to timely actions.



Tableau's 4 Primary Connectors to SAP

SAP HANA

This database runs applications and stores data in solid-state devices (in-memory) instead of hard-disk drives. Using HANA typically increases throughput, reduces latency, and can vastly increase overall performance.

At this time, far more enterprise customers have invested in HANA than have actually implemented it. HANA solves many of the speed issues commonly reported by SAP BW users. Tableau uses ODBC and SQL to connect to HANA standard tables and views, as well as special analytic content models like analytic views and calculation views. To do this, be sure to use the _SYS_BIC schema in HANA. Input parameters and variables are supported in the Tableau SAP HANA connector.

Many organisations run SAP HANA behind SAP BW, trading some of the speed benefits of SAP HANA for the advanced security and governance of SAP BW.

When SAP HANA is configured to support single sign-on (SSO), after you sign in to the SAP HANA server, you can access data, and publish data sources and workbooks to Tableau Server, without having to re-enter your user name and password.

SAP NetWeaver Business Warehouse (SAP BW)

Tableau connects to SAP BW, but despite its name, BW isn't actually a database. SAP BW acts as an ETL tool, handling data requests and feeding data back to Tableau. Hiding behind BW can be one or more of the databases that are certified for SAP systems, including SAP HANA.

Tableau connects to BW using the OLE-DB for OLAP interface and generates MDX queries. The Tableau SAP BW connector is SAP-certified, and also supports mandatory variables.

In this way, Tableau can connect directly to InfoCubes or through BEx queries. Many customers enhance their BW performance with BW Accelerator or HANA. Without these, SAP BW—and a live connection to BW—can be slow.
With Tableau Desktop 9.1, the SAP BW connector supports data extracts, which noticeably improves performance.

SAP BW query performance depends on many factors, and merely using Tableau at the front end will not improve overall performance. Factors like hardware, database configuration, BW configuration, BW cube design, and query design can all impact performance. To optimize performance, make sure there are no bottlenecks in CPU, memory, or I/O.

"We chose Tableau to understand our SAP data because of its ease of use and intuitiveness. It will help employees across our company to discover, understand, and see trends and outliers in the numbers so they can take quick action."

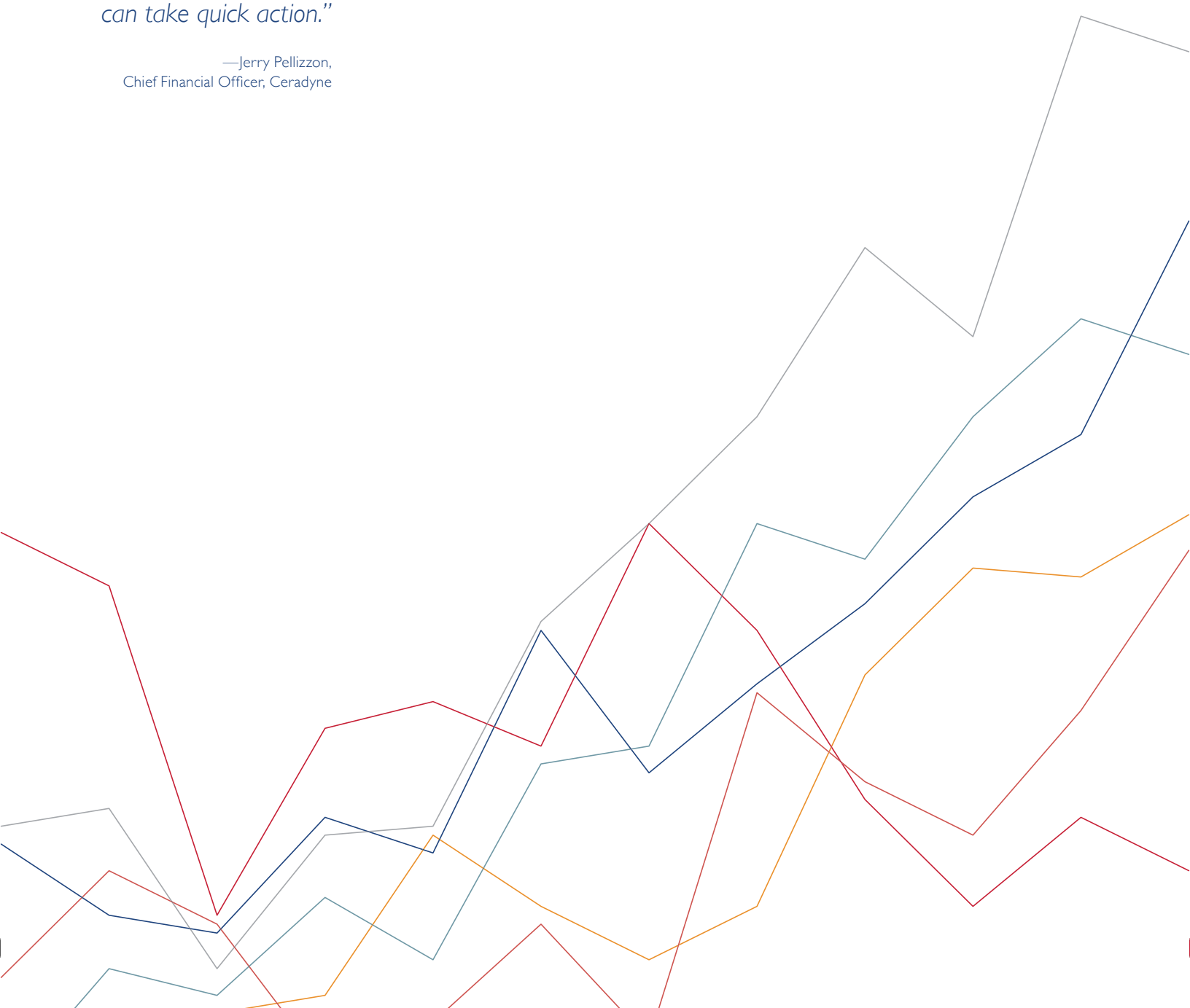
—Jerry Pellizzon,
Chief Financial Officer, Ceradyne

SAP Sybase ASE

Although SAP has owned Sybase since 2010, the SAP certification of ASE is a recent development. Sybase launched a product called Sybase SQL Server in 1995. A year later, Sybase changed the product name to Adaptive Server Enterprise to differentiate it from Microsoft SQL Server. The product stays true to its roots and, despite the name change, is still a SQL Server database.

SAP Sybase IQ

This is a column-based database engine designed to handle petabyte-scale data in a cost-effective and scalable way.



Working with SAP

With Tableau, it is easy to create a live connection with full support for the underlying SAP security. This is accomplished without additional SAP security scripting. The connection empowers users to interact with the data and gain insights at the speed of thought.

Performance

Depending on the environment, analysing data through SAP BW can be slow. BW is not a database; it acts as an ETL (Extract, Transform, and Load) tool to interpret your request and fetch the data. Connecting Tableau to this environment means that Tableau's ability to access data relies on BW's ability to deliver it. SAP has a BW accelerator that can improve this throughput.

You can also extract the data or utilize SAP HANA, which has been specifically designed to overcome performance issues.

Output

Create visualizations in Tableau Desktop, and share them securely with Tableau Online or Tableau Server. Published workbooks carry the level of security inherent in the SAP data connection. Tableau can add additional user-level—or even row-level—security. This can be applied in several ways:

- Vary the level of data users can view based on login credentials.
- Prevent saving, editing, and sharing of visualizations and underlying data.
- Allow or deny image export.
- Allow or deny Web edits, saves, and deletes.
- Add and view comments.

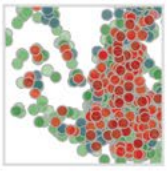
Tableau Online or Tableau Server can maintain the live data link to ensure all users see up-to-date information.

Conclusion

Many companies are already seeing and understanding their SAP data with Tableau. They are empowering their employees with self-service analytics, enabling them to quickly spot trends and outliers. Try Tableau for yourself and discover what your data is trying to tell you.

About Tableau

Tableau helps people see and understand data. Tableau helps anyone quickly analyze, visualize and share information. More than 29,000 customer accounts get rapid results with Tableau in the office and on-the-go. And tens of thousands of people use Tableau Public to share data in their blogs and websites. See how Tableau can help you by downloading the free trial at tableau.com/trial.



Additional Resources

Download Free Trial

Related Whitepapers

Rapid-Fire Business Intelligence

6 Strategies for Transitioning to the Cloud

How to Build Dashboards that Persuade, Inform, and Engage

See All Whitepapers

Explore Other Resources

· Product Demo

· Training & Tutorials

· Community & Support

· Customer Stories

· Solutions