



SAP
Innovation
Awards 2019



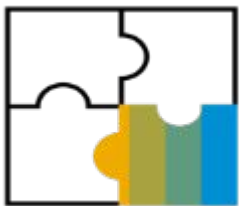
SAP Innovation Awards 2019 Entry Pitch Deck

Next gen BI journey delivers single source of truth, in real time,
across enterprise

Agilent

THE BEST RUN





Company Overview

Agilent Technologies

Agilent Technologies is an American public research, development and manufacturing company established in 1999 as a spin-off from Hewlett-Packard. The resulting IPO of Agilent stock was the largest in the history of Silicon Valley at the time.

The company provides analytical instruments, software, services and consumables for the entire laboratory workflow. Agilent focuses its products and services on six markets: food, environmental and forensics, pharmaceutical, diagnostics, chemical and energy, and research. From 1999 to 2014, the company also produced test and measurement equipment for electronics; that division was spun off to form Keysight.

Next gen BI journey delivers single source of truth, in real time, across enterprise

Agilent

“Quote”

COMING

Challenge

After Agilent spun off Keysight Technologies in 2014, they decided to pursue a consolidated enterprise data platform. Getting to data took a long time, data was error prone and information didn't reconcile between systems. Without easy access to data, employees weren't able to make informed decisions.

Solution

Agilent built a new analytics platform from scratch which went live in 2016. Almost all enterprise data is now stored in a 5.5 TB HANA Native Sidecar for Analytics and there now exists a single source of truth for business analytics across the enterprise.

Outcome

The new platform enables real time access to data across the enterprise and eliminates the need to reconcile data within and across the BI tools.

Visibility on key growth drivers helps increase market share by improving performance across departments. Increases customer sat & reduces churn. Cuts costs by reducing manual processes and eliminating errors.

The IT team has saved costs and has been freed up to innovate further, rather than spend their time pulling reports for business users.

Business users now have direct, real time access to all data relevant to them, so they don't have to rely on IT and can answer questions that they previously could not get.



Business Challenge & Objectives

Challenges:

- Data was fragmented and stored in many silos across the enterprise
- Data did not reconcile across the systems/silos
- It took days and sometimes weeks to access data, and by the time they got the data, it was often outdated
- Business users didn't have direct access to data, often taxing IT as well as the business resources
- Important decisions were not being made because there was no data to support them

Objectives:

- Remove need for reconciliation - ie, One Agilent/Source of truth across the enterprise
- Eliminate data silos
- Drive down the time it takes to access the data (from weeks to hours and days to minutes)
- Give business users direct access to reporting tools, so they can self serve
- Enable informed decision making

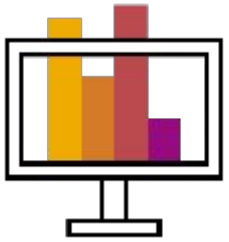


Project / Use Case Details

The new data platform pulls in data from multiple sources - SAP ECC (ERP and CRM), MES, and some non SAP systems. SLT is used for real time replication from these sources, into HANA. HANA is the regulator of the both the front and back ends. Virtual data models are created in HANA on this live data.

Agilent uses HANA in memory to compute aggregations at run time. People who are accessing the data come in through HANA, from Spotfire, QlikSense, SAP Webi, and SAP Analysis for Office. There is a single source of truth in that they are all accessing the exact same HANA data model with the same role level data security. They access the virtual tables in memory and are able to see all of the data quickly in one place. There are no multiple aggregations in the models; Rather HANA is doing the work and keeping the data at the lowest level.

HANA collects the data, secures it and makes it available to the users at the speed, scale and format that they need. Almost a dozen innovations have come about as a result of this implementation, due to insights coming from data that was previously unavailable. The data is accessed across the enterprise, by Sales & Marketing, Logistics, Finance, Services and more.



Benefits and Outcomes

Business / Social

- Visibility on key growth drivers helps increase market share by improving performance across departments.
- Sales/Marketing:
 - Predictive analytics prevents 1% contract churn
 - Order reporting reduces errors to ~0%/Improves customer sat & reduces manual process by 90%
 - Customer Account Reviews: Prep time reduced by 6,000+ hrs/yr
- Logistics has near real time/live remote monitoring of goods and shipments. They have more accurate information to manage customer expectations and on time delivery has improved.
- Lower cost self serve transactions are growing
 - FY18 ecommerce touchless rates were 56% and \$\$ grew >30% to 7.9% of overall order bookings
 - In 6 months, online renewals grew from 1% to 8%

IT

Self service capabilities reduce overall IT costs. Role based security on HANA means over 2,500 user see dashboards customized to their needs and only data relevant to their job, while protecting Agilent's IP and data privacy. There are over 260 unique dashboards being used across the enterprise.

The IT team has been freed up to innovate further, rather than spend their time pulling reports for the business users. They are able to focus their energies on predictive capabilities and HANA 2.0 for 2019.

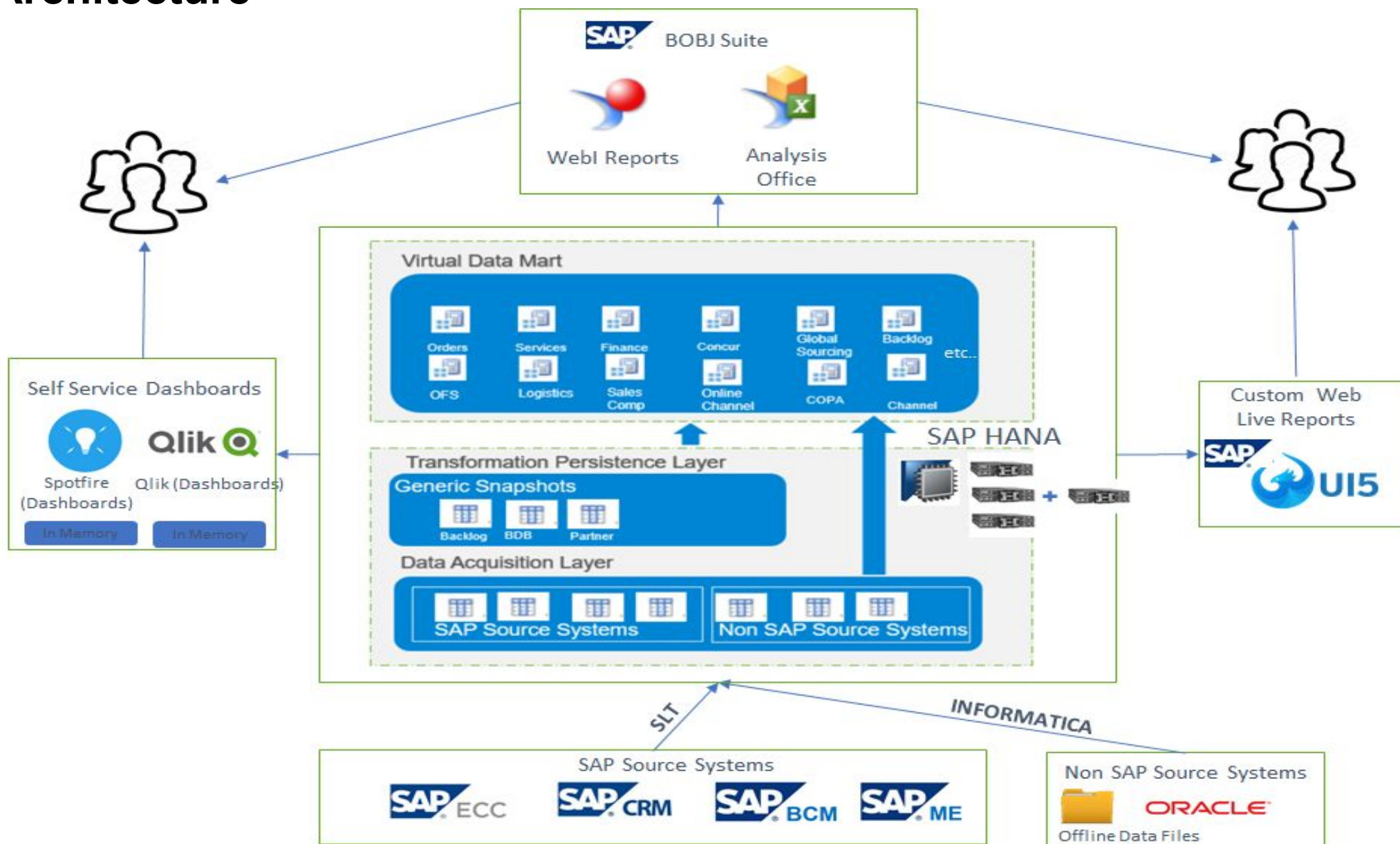
Human Empowerment

Multi-functional (finance, sales, marketing, services, and customer ops) single source reporting gives business users direct, real time access to the data so they don't have to wait on IT, and they can analyze information from disparate datasets or sources and get answers to questions that they previously could not. This enables them to be more effective at their jobs.

Business users can build and publish reporting/dashboards in weeks rather than months. There is now a single place to look at PO information, in real time, through a simple google interface, allowing everyone to research POs more efficiently. What used to take days of research now takes seconds.



Architecture





Deployment

Date of Deployment or POC: Live - Q3 2016

Number of live users: 4,000

SAP Technologies Used:

SAP HANA ENTERPRISE
SAP WEBI
SAP ANALYSIS FOR OFFICE
SAP UI 5
SAP SLT

Server Processor: Cisco Scaleout TDI

Linux Distribution: RedHat