

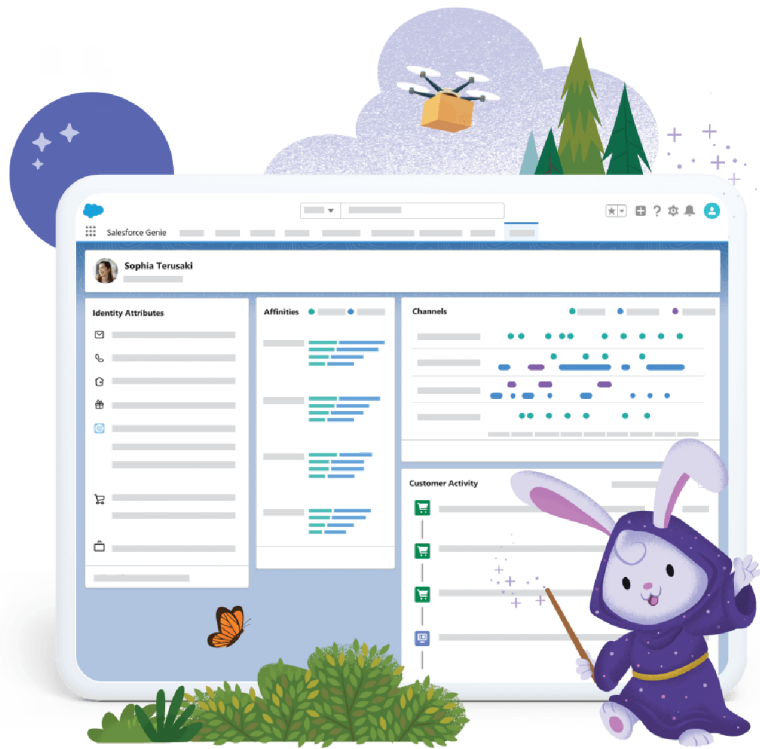


Salesforce Data Cloud:
**Your Wish Granted
for Customer 360...**
If You Know Where to Begin



If You're Using Salesforce Today

You already know its capabilities as a customer relationship management (CRM) platform. But with the launch of Salesforce Data Cloud and the evolution of its Customer Data Platform (CDP) to deeply integrate with both Salesforce and leading cloud services, the Salesforce applications ecosystem is itself becoming an interconnected data platform. What does that mean for businesses like yours, that house, aggregate, translate, and make informed decisions based on data in everyday workflows between sales, marketing, and beyond?



The answer is nuanced, and fortunately, there are ways to ensure you're making the most of Salesforce as a data platform with unique capabilities to unify, standardize, and connect data across Salesforce applications (e.g. Sales, Service, Marketing, Tableau, Slack, etc.) and a growing network of cloud services, such as Snowflake, AWS, GCP, and many more.

The Rise Of Seamless Data Sharing Between Salesforce And Snowflake

Self-service data platforms, such as Snowflake, enable the security, governance, and data engineering capabilities that are necessary to improve accessibility to data so that business-oriented data product teams can innovate safely on single sources of truth — particularly without corrupting golden data sets (i.e., clean, validated, integrated data sets). These are teams led by business product owners but include a blend of skill sets across technology and business.

Customers of both Salesforce and Snowflake have rightfully benefitted from their existing partnership, which enabled bi-directional connectors for Salesforce to ingest data from Snowflake tables into Salesforce objects, CRM Analytics and Tableau data sets, and Einstein Discovery stories. These connectors allow better access and visibility into business-critical data

that isn't stored in Salesforce to drive informed decisions for forecasting, customer acquisition, and marketing analytics. This unlocks white space for more wallet share and provides a better understanding of each customer's lifetime value. These connectors also allow for easy export of data from Salesforce's core platform (i.e., Sales Cloud, Service Cloud, Industries) into Snowflake, where data analysts and engineers can enrich it with other data sets to drive unified analytics.

These existing connectors take a traditional approach to data integration, which involves copying data and moving it between platforms. While these connectors benefit many organizations, Snowflake customers who leverage zero-copy data sharing understand just how powerful it is to be able to connect these two leading cloud platforms in real time.

Zero-copy Data Sharing

With the advent of Salesforce Data Cloud and the Snowflake Data Cloud, Salesforce and Snowflake have pushed their integration partnership further to enable zero-copy data sharing using Apache Iceberg and Parquet files. This new approach will eliminate the need to copy and move data and opens the door to real-time integration between the platforms as it no longer relies upon ETL operations and maintenance of duplicate data sets.

These new innovations will give Snowflake and Salesforce customers the ability to easily access data from Snowflake, harmonize this data to the Customer 360 data model, and unify billions of records around individual customers. Organizations can then perform calculations on this unified data set to understand the current state of their customers

in real time and take action via integrations to Salesforce's network of enterprise-leading systems of engagement (i.e., Sales Cloud, Service Cloud, Marketing Cloud, Tableau, Slack, etc.).

Further, by incorporating the Snowflake Marketplace, you will be able to unlock the full potential of your data by enabling data sharing from third-party vendors, partner ecosystems, and Salesforce applications to create a significant competitive advantage. Data sharing with Snowflake will provide real-time access to a rich ecosystem of data sets, which Data Cloud can access and prepare for actionability across Salesforce clouds to support a wide array of CRM use cases while lowering data management and system integration costs.



Salesforce Data Cloud: Data 360 Beyond Salesforce's Customer Data Platform

This is where Data Cloud comes into play — as the next iteration of Customer 360. Data Cloud is one of the most significant architecture investments Salesforce has made in its platform from an analytics and data perspective.

Let's dig into the specifics: How did we get to Data Cloud? How is it unique? What's next for Data Cloud where Tableau, CRM Analytics, and related technologies are concerned?



The Evolution Of Salesforce's Customer Data Platform Into Data Cloud

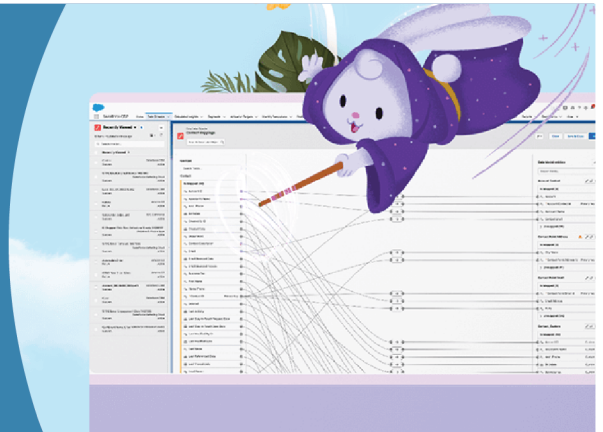
Salesforce's Customer Data Platform (CDP) was built to address a long-standing challenge in marketing. In order to deliver personalized customer experiences, marketers need to distill millions of frequently duplicated customer profiles stored in systems across the enterprises into a single profile. Then, they need to connect all the touchpoints (e.g. purchases, service interactions, web visits, email clicks, phone calls, etc.) to this customer profile.

Even the most basic personalized experience you expect from your favorite brands requires the unification of billions of records to individual customer identities. It's a huge data problem that thus far has not been solved by any one company — and it's not a problem exclusive to marketing.

Salesforce recognized early on that the system they were building from the ground up had applications far beyond marketing, which is why they designed Data Cloud to enable use cases for customer engagement across sales, service, and commerce in addition to marketing. As the leading provider of customer engagement platforms that store massive amounts of first-party customer data, Salesforce is uniquely positioned to finally address the challenge of delivering personalized customer experiences across the enterprise while keeping IT costs in check.

How Salesforce Data Cloud Will Enable Customer 360

Actionability is key here. Data Cloud is all about the creation of a truly 360-degree customer view and making that unified view actionable to create more personalized customer experiences. Now let's consider a few plans for the future of Data Cloud in terms of actionability.



One Of The Mechanisms For This Is A New Type Of Lightning Flow That Can Be Triggered By Data Cloud Events

We'll start to see products for service, sales, etc. that leverage Data Cloud's foundational technologies. It's all about use-case specific actions for harnessing the power of real-time Customer 360 experiences across Salesforce clouds. Imagine a car or other product associated with a customer that feeds real-time data about defects or required service into Data Cloud; this informs a bot's behavior as part of managing a self-service process that notifies the customer of the issue and schedules a service appointment. That's just one example. The possibilities are truly limitless.

The New Architecture Will Enable Salesforce Ingestion Of Potentially Unstructured Or Structured Data From Any Source

Once data is brought into Data Cloud it will be able to be shaped, cleansed, enriched, and engineered within the platform and used for analytic, data science, and workflow-based use cases across Salesforce applications. Tableau and CRM Analytics will read directly from Data Cloud; new zero-copy integrations in addition to Snowflake are sure to come.





Data Cloud Will Also Enable The Unlocking Of Salesforce Data

Meaning that Salesforce data will be able to be landed within Data Cloud, and made available to Snowflake via zero-copy data sharing. That data can then be joined and engineered with other data sets residing within Snowflake for enterprise analytics or data science needs. As the data updates across the Salesforce platform, it will stream into Data Cloud where the data is standardized, unified around a single customer, and enriched with additional data points — creating an optimized data set that will be immediately available to Snowflake.

The Same Capability Will Be Available In Reverse, Where Snowflake Data Sets Can Be Zero-copy Shared With Salesforce Via Data Cloud

This is such that Salesforce analytics, predictive models, and workflows will be fueled by a richer enterprise data set, without having to build new data pipelines.

More Possibilities Arise With Salesforce Data Cloud

The importance of this kind of consistent, real-time, single-view data sharing can't be overstated. The holy grail of CRM has always been to unlock ERP data, combine it with customer relationship data, and use the combined data set to drive customer workflows across interaction channels.

The biggest barrier to date? The level of integration required to transport and transform data. This turbocharged Salesforce-Snowflake integration partnership will greatly simplify that process.



What Data Cloud Will (And Could) Do For Tableau And CRM Analytics

As we think back to the Salesforce analytics roadmap, one of the major goals has been to merge the data layers between Tableau and CRM Analytics. There's a world in which Tableau Cloud and CRM Analytics move fully to Data Cloud for the data storage layer, thereby providing a single source of truth in analytics data. Both tools can read from Data Cloud and directly from Snowflake today. It will be interesting to see where Salesforce takes this in the future. Given the potential for real-time data availability within Data Cloud, users should eventually be able to develop real-time data sets for analytics in both Tableau and CRM Analytics.

Tableau would be considered the data visualization and business intelligence layer on top of Data Cloud — allowing users to visualize, make sense of, and take action on live customer data. There are a number of benefits to the symbiotic relationship between Tableau and Data Cloud. Namely, users could:

- Natively connect to a single source of accurate customer data
- Perform instant analysis with just the single click of a button
- Activate customer engagements and experiences with Flows triggered directly from Tableau
- Enable employees to act on AI-powered insights without leaving their regular workflow
- Benefit from cost savings by consolidating data warehouse (or rather Data Cloud) investments

Plus, Integration With Enterprise Data Science Tools

The last big thing to get excited about is the ability to integrate with enterprise data science tools like SageMaker, ML Studio, and Google Cloud AI. It has long been a focus of ours at Atrium to help our customers federate their AI architectures by combining enterprise data science tools with Einstein and Salesforce.

Salesforce is making that much easier via data sharing between Data Cloud, Snowflake, and enterprise AI tools from the hyperscalers. Salesforce is currently in pilot mode with SageMaker, a popular machine learning platform. Because Data Cloud enables data sharing with SageMaker, SageMaker can train and run models using data within Data Cloud. The SageMaker models can then publish outputs directly to Data Cloud, which can be consumed across Salesforce clouds into core objects, analytics, and Lightning Flows.



In the future, we'll have the ability to deploy models from SageMaker, ML Studio, and Google Cloud Platform directly to Data Cloud. Meaning that models developed in those tools can be run natively within Data Cloud. This will be enabled through a new bring-your-own-model capability — a win for increased explainability and actionability of models developed from external platforms.



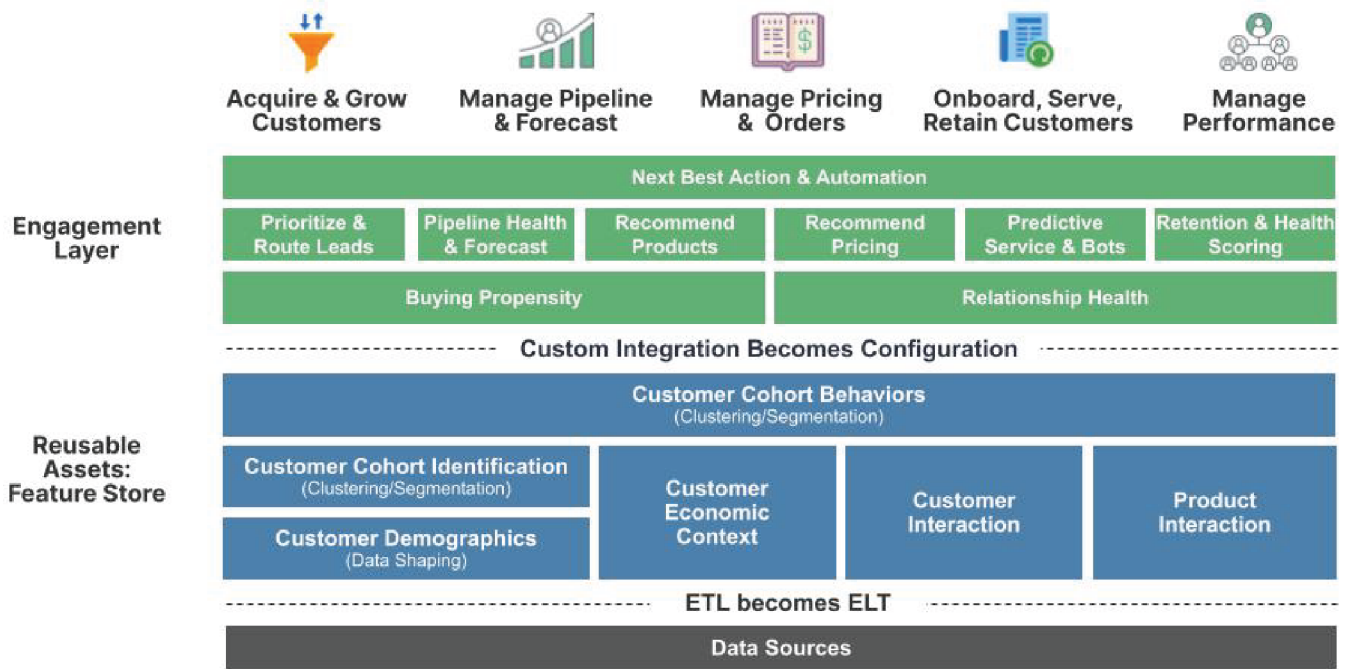
The End Goal Of Using Richer Data Sets To Develop More Powerful, Actionable Insights

All of these changes serve to simplify and accelerate the process of developing actionable insights using a much richer data set — think orders, shipments, assets, billing, pricing, quotes, etc. This will also allow Salesforce partners like Atrium to improve the success rates of heavy-lift data science projects that use hyperscaler platforms for model development, by solving for last-mile experience and adoption in Salesforce. Enriching Salesforce data with data from other enterprise data sets stored in Snowflake (e.g., ERP, finance, HR, product telemetry, etc.), as well as third-party data from the Snowflake Marketplace, has always been a core tenant of the Salesforce and Snowflake partnership. With zero-copy data sharing, these two platforms will make this enrichment process seamless.

Are You A Data Leader?

Data leaders are reporting returns on their data that are 3X that of their industry peers. The most significant of their attributes is the ability to leverage a single data asset in multiple ways, as well as their focus on landing last-mile experience for adoption.

Realize the Value of Your Data Faster with Actionable Customer 360



The visual above represents a standard pattern for data reuse across some of our most common use cases. However, many of our customers have been challenged with the complex effort and high costs associated with building custom data pipelines, and building the last-mile integrations into their systems of engagement.



Using Your Data To Deliver On The Promise Of Customer 360

While the market has come a long way in the last year or so (particularly with Snowflake's ability to support self-service data access for analytics and data science teams), the Salesforce integration required for last-mile consumption wasn't as robust as it's become — or becoming.

Salesforce is now reducing a lot of the custom work by reducing or potentially eliminating the reliance on ETL, so that data will be joined and shaped declaratively within their Data Cloud or Snowflake, and shared across both platforms. The out-of-box integration with enterprise data science tools will mean that the custom integration associated with externally developed models will go away; model explainability, actionability, and adoption will improve.





Questions To Ask On Your Journey To Data Empowerment And Customer 360 With Salesforce Data Cloud

- What data science tools and data platforms are you using: Snowflake, AWS, SageMaker, or others?
- Where are the gaps in your systems' connectivity to each other and how could adoption and insight or data quality be improved?
- What are your use cases? Are there use cases in need of a custom approach?



Partner With Certified Salesforce And Snowflake Experts

The right partner, like the right data strategy, can help set you on the path to success... and help you stay there in the long term. Our team of data experts and certified Salesforce consultants and Snowflake SnowPros at Atrium can help you take advantage of the powerful combination of Salesforce Data Cloud and the Snowflake Data Cloud — including integrations and optimization across Tableau, MuleSoft, and other everyday systems and workflows. Reach out to us and let's discuss your goals.

ABOUT ATRIUM

Atrium is a consulting services partner that helps advise, implement, optimize, and manage analytics, AI, and machine learning solutions. We combine industry expertise, leading cloud platforms, and data science to help our customers unlock the power of their data and solve their most important challenges. [Learn more at atrium.ai](https://atrium.ai).

✉ info@atrium.ai