



THE MODERN CUSTOMER DATA PLATFORM: WHY YOU NEED ONE NOW AND WHAT YOU NEED TO KNOW

**Gain a Unified View of Your Customer for Breakthrough Personalization at Scale,
Optimizing Marketing Spend, and Boosting Productivity with the Data Cloud**



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EXECUTIVE SUMMARY

A LOT HAS CHANGED IN A FEW YEARS; IS YOUR MARKETING STACK READY FOR WHAT'S NEXT?

In the last decade, customer data platforms (CDPs) have quickly risen to prominence as a critical part of the MarTech stack. A facilitator in delivering the highly personalized campaigns marketers seek and audiences expect, the main jobs of the CDP are to create audiences and segments, aggregate first-party customer data, and activate that data across the multiple touchpoints involved in the increasingly complex buyer journey. Yet, this important process has faced many hurdles: data residing in multiple data silos and data marts challenge marketers' pursuit of that ever-elusive single source of truth, while a changing privacy landscape creates additional barriers to collecting and managing customer information.

Today, marketing teams must be able to develop robust customer 360s by capturing data, resolving identities, and enriching the customer profile by incorporating third-party data to reach customers with targeted, relevant, and compelling content. More than ever, CMOs need to access timely data to rapidly garner accurate insight into marketing spend and advertising ROI, but data silos across multiple systems and applications within and beyond MarTech stacks create daunting barriers that must be overcome.

This ebook considers the opportunities Snowflake can offer as the backbone of your customer data platform strategy. The Data Cloud offers immediate access to live data, shareable across the enterprise and your ecosystem, that can be quickly implemented to take advantage of new opportunities while allowing secure and governed data access, all in a world that's beginning to see privacy very differently.

We offer this guide to creating an operationally efficient and highly flexible customer data platform running on top of a scalable, performant, and robust cloud data platform. Ultimately, what's at stake goes well beyond optimizing ad spend or even creating personalized campaigns. The larger issues shaping today's business climate are challenging marketers to rethink how brands can build trust, create value, and engage the more demanding customer of tomorrow. It's time to take this journey to the next level.

THE CUSTOMER DATA PLATFORM MARKET EVOLUTION

Marketing organizations today are pressed to do more with less. The CDP has quickly risen to be a critical part of the MarTech stack; its main purpose is to enable the creation of segments and audiences, aggregate all customer data, and activate them across different channels to better personalize campaigns and deliver timely messages to the right touchpoints. As the category evolves, customer data platforms have emerged that also offer functionality in adjacent workflows such as reporting, data ingestion, identity management, orchestration, and other capabilities.

Marketers now use first- and third-party data to personalize campaigns for greater impact, but the job of moving data into the CDP—in addition to being time-consuming and expensive—lies largely outside marketing's domain. Added to these cross-organizational challenges is a fast-moving regulatory and cultural landscape that necessitates marketers' ability to track buyers throughout their journey. Marketers need to eliminate the data silo conundrum; Snowflake offers not just a marketing source of truth, but a true single source of truth shared across the entire enterprise.

The message is clear: the functionality promised by a customer data platform—creating micro-segments, unifying all customer data, and activating that data to relevant marketing channels—will play an increasingly important role in your marketing strategy in the next few years. However, many CDPs are coming up short in unlocking modern, data-driven marketing for organizations. Why is this the case and why are some CDPs generally not keeping their promises to act as the heartbeat of a modern marketing data stack?

The customer data platform has been showing up in MarTech stacks since around the middle of the last decade. Today, CDPs are increasingly common and growing in importance as CMOs and their teams seek new ways to measure the effectiveness of ad spend and marketing ROI. The category is growing rapidly—\$4.2 billion in 2022 and analysts forecast it will be \$19.7 billion by 2027.

The CDP industry continues to evolve rapidly. Few trends in the industry include greater involvement by corporate IT teams, vendor specialization, and extension of CDPs to support customer acquisition.

The CDP Institute's latest (2022) [Industry Update report](#), published in July, identified more than 160 CDP vendors with 15,000 employees and \$5.7 billion in funding—figures that had grown by 10%, 33%, and 70%, respectively, over the previous year. The Institute expected that 2022 revenue for the industry would reach \$2 billion, a 25% increase over 2021.

[Learn more](#)

THE PROBLEM WITH TRADITIONAL CDPS— OR, THE TRUTH ABOUT THE SINGLE SOURCE OF TRUTH

Data fragmentation hinders organizations' ability to operate from a single view of the customer, leading to high costs and inefficiencies throughout marketing stacks across every industry. What's needed is a data platform that delivers a unified view of the customer to all users throughout the entire MarTech stack and that can, ideally, be shared across the entire organization and beyond. Marketers have evolved a "marketing source of truth" to meet their needs, but with increasing pressure to maximize the return of their marketing and advertising investments, they demand an approach that eliminates redundancies throughout their stacks. The new era of marketing requires a true single source of truth, one that integrates customer data with the full breadth of business data to support advanced use cases and ensure superior experiences for customers in a cost-efficient way.

Over the past several years, marketers turned to a plethora of SaaS apps to help manage the myriad tasks put upon them. They are learning that, after turning to CDPs to assimilate and make actionable all the data that comes in from CRM, email marketing apps, and other tools, they typically end up with new data silos. Ironically, the CDP set out to eliminate data silos but often ends up being a data silo itself, separate from the organization's core data platform.

To better understand this, it's important to take a trip down (recent) memory lane and explore the rationale for the emergence of the category. The broader evolution of how data is used across the enterprise, and the rise of data-first enterprises, has grown up alongside the marketing stack. As one of the initial personas to feel the pain of data silos directly, marketers had to come up with their own version of the truth, so to speak; they couldn't wait for the rest of the enterprise and took matters into their own hands.

Without a proper aggregated view of all customer data, marketers were dependent on data and technical counterparts to provide them with the right data sets, often with long delays and inconsistencies. The alternative was many hours spent manually stitching data together in spreadsheets to create the right customer 360 foundation to enable them to operate with deeper intelligence. A change was needed, and CDPs were the solution.

However, while the rationale for CDPs was sound, their implementation architecture often led to a separate data silo from the central cloud data platform within an organization's data stack, leading to significant risks and inefficiencies:

- A separate CDP from the organization's central data platform means the need to copy and move data between locations, increasing the **difficulty of adhering to strict privacy and security requirements** as well as applying necessary governance controls
- Increased data latency results in **poor customer experience**, inefficient campaigns, and dollars wasted
- **High costs** of dedicating engineering resources to stitch systems together and managing multiple copies of data
- **Wasted value** by limiting the breadth of use cases available for marketers. For instance, pushing out ad campaigns by looking at surplus inventory or calculating LTV and requiring financial and marketing data to be joined

By definition, having multiple data platforms to store data means you lack a single source of truth, leading to significant inefficiencies. Today, organizations find themselves at a crossroads with a clear opportunity to capitalize on the potential of modern, data-driven marketing. They need a CDP strategy that, instead of competing with their single source of truth, embraces it and leverages all its technological potential. Enter the modern CDP.

ENTER THE MODERN CDP

Today, it is possible to activate your marketing initiatives using the same source of data as the rest of the marketing team—and even the entire enterprise. A CDP built with a customer 360 in Snowflake allows you to leverage a single source of truth without copying or moving data. This means better governance, lower costs, and no data latency. When the CDP leverages a unified view of all customer data in the backend, a broader set of use cases can be realized across your marketing team. For instance, you wouldn't advertise to a customer that may have an open support ticket with you. Or, leveraging critical growth metrics such as LTV would require joining financial and marketing data. These use cases, and so many more, are the bread and butter for marketers and are simplified and accelerated when the data is aggregated in a single location.

The customer 360 view that marketing teams have sought for more than a decade is finally here. While there is much to consider to align your marketing strategy and goals by selecting the right CDP design and tools, the great news is that implementing it may be right at your fingertips. With a modern CDP running on Snowflake, you gain breakthrough levels of customer insight in a way that easily shares that insight across your enterprise, delivers granular reporting, and boosts marketing productivity.

TWO APPROACHES TO THE MODERN CDP

The key enabler of the modern CDP is a marketing data stack that uses the Data Cloud. Having chosen to implement the CDP over a cloud data platform that delivers access to near real-time data without needing to copy or move it, marketers now have two main options: the packaged CDP or the composable CDP. Let's explore both options.

PACKAGED CDP

The first option is to use an off-the-shelf CDP. You may be thinking that we just covered why this approach gives marketers headaches. However, some CDP providers have realized that they can use the modern data sharing capabilities of Snowflake to eliminate the need to copy and move data between data repositories.

Breaking this down a bit: these CDP providers have built their platforms on top of Snowflake, so that a Snowflake customer can instantly and securely share data between them, eliminating any need for traditional and outdated collaboration capabilities that result in multiple copies of data. This becomes extremely powerful because it allows customers to bring all their data to bear when executing marketing campaigns, not sacrificing the real-time engagement that some CDPs provide. Furthermore, once campaigns are orchestrated, the analytics can be shared back to the customer's Snowflake instance to provide them with the full breadth of data for reporting purposes.

BENEFITS OF THE PACKAGED CDP

Buying an off-the-shelf solution has the considerable advantage of making it quick and easy to start gaining insights into areas such as email marketing. This advantage often makes it ideal for businesses whose needs are relatively simple and who may lack the dedicated data or IT resources to execute modeling for marketing use cases in Snowflake. It also enables companies to cap investments in data and IT resources. This type of modern CDP approach also offers reduced data latency, increased governance, and the fact that this is a fully managed solution that frees an IT team of managing accounts and credentials. This is an excellent choice for companies who lack dedicated data resources and want to leverage an out-of-the-box functionality with a single interface.



Figure 1: High level architecture showing a Snowflake customer sharing data with a CDP powered by Snowflake

COMPOSABLE CDP

Another option of a modern CDP is the composable CDP. Building a robust customer 360 in Snowflake means you can work with a broad and leading ecosystem of partners that can support data ingestion into the Snowflake Data Cloud. Once that data is in Snowflake, other ecosystem partners offer the opportunity to model and harmonize your data directly in Snowflake, as well as resolve identities and enrich your data sets natively in the Data Cloud. This is noteworthy. Previously, your data would be moved to the application of your choice for enrichment and identity resolution, but with Snowflake, that workflow is inverted to maximize security, privacy, and performance. Customers can opt for the application of their choice directly where their data lives in Snowflake without the need to move or replicate their data sets.

The proliferation and maturity of cloud data platforms has led to the introduction of a set of providers and technologies that enable data activation directly from a customer 360 built inside the organization's Snowflake Data Cloud. This starting point is typically used for marketing analytics use cases but lacks the activation layer. Multiple providers in the ecosystem have recognized the opportunity this offers businesses and have developed capabilities to enable data activation directly from the organization's Data Cloud, thus surfacing the composable CDP.

In the composable CDP, customers can run campaigns directly from Snowflake, enabling them to tap into the full breadth of their enterprise data—including customer data—without having to move, copy, or sync data across locations. Organizations that work with a composable CDP can benefit from working with best-in-breed technologies across the value chain and maximize the impact of existing investments in their data platform.

The complexity of a company's customer data can also make an out-of-the-box customer data platform solution untenable. On average, organizations use 110 SaaS apps, and it would be unrealistic, and certainly inefficient, to expect a purchased solution to be configured to ingest data from all of them. But if a customer data platform solution were built on top of a company's data platform, all of the data sources would be present.



BENEFITS OF THE COMPOSABLE CDP

Built with best-of-breed applications connected directly to the Data Cloud, a composable CDP offers flexibility; organizations can leverage their existing stacks but still add a single component that they may be missing or want to improve—the most common are activation layers or identity resolution applications. In this case, “best of breed” means handpicked to deliver just what you need in the best way possible and that easily sits on top of a modern platform. This universe is large. Time to benefit for core functions within the CDP is short as there is no need to wait for the whole stack to be integrated before one app can run effectively. Critically, if your organization currently has a robust customer 360 built out in Snowflake for marketing analytics use cases, simply adding the activation layer by selecting a technology vendor that integrates with Snowflake allows you to seamlessly create a modern CDP by leveraging your existing investments.

Furthermore, a composable CDP means you have increased control, flexibility, and higher data granularity. Marketers can use live data directly from their central data repository for segmentation and activation to any channel. Composable CDP also means you mitigate the risk of monolithic vendor lock-in and can pick and choose the best application for your particular business needs. By having the activation layer directly connected to a customer 360 in Snowflake, marketers can access all of their data without the need to copy it, move it, or sync it across data silos.

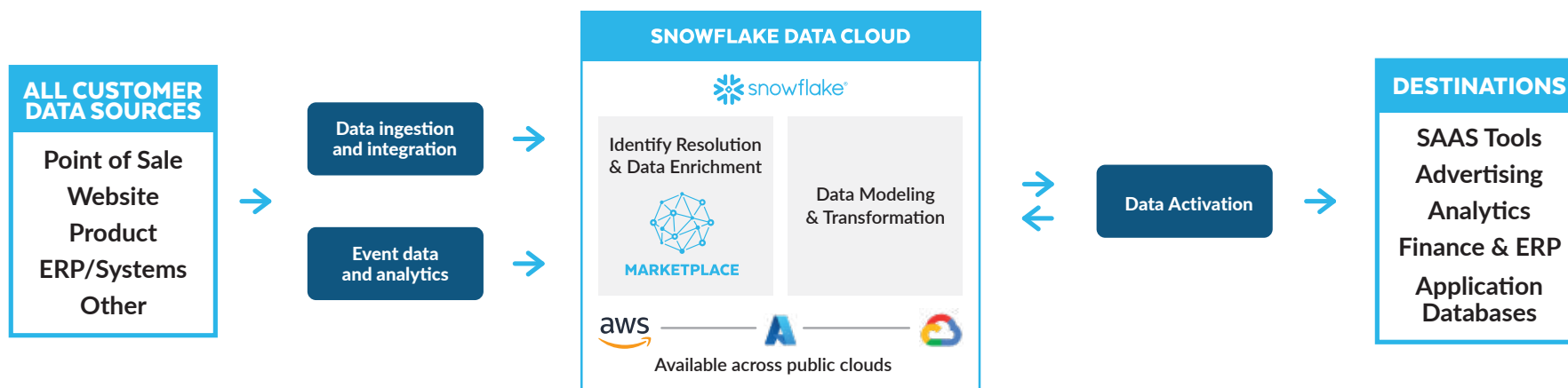


Figure 2: Example of a high-level architecture of a composable CDP

GUIDANCE FOR CHOOSING THE BEST CDP STRATEGY

Obviously, any technology decision should align with your strategy and goals. But even if your team has used a CDP for years, it's likely time to reexamine how well your approach now aligns with your present and future goals, as well as to reflect on recent innovations in MarTech to ensure you are current with the latest and greatest. In short, times change, and your priorities may need to also.

Here are four primary business goals that drive the CDP decision process:

DRIVE INCREMENTAL REVENUE AND OPTIMIZE AD SPEND

Well-executed personalization initiatives can lead to significant jumps in loyalty, retention, and, ultimately, customer lifetime value. They can also make ad spend and marketing investments more efficient through improvements in targeting and campaign relevance.

According to [Harvard Business Review](#), personalization can reduce acquisition costs by up to 50%, boost revenues by 5-15%, and increase the efficiency of marketing spend by 10-30%. Companies working with Snowflake have achieved over \$100 million in incremental revenue from their personalization initiatives.

INCREASE MARKETING TEAM PRODUCTIVITY

Your marketing team may currently spend substantial time waiting for insights or manually uploading customer lists to test hypotheses for new campaigns. That's because they're usually reliant on the IT team to pull relevant information and modify the data sent to marketing channels.

Some customer data platforms give marketers autonomy from their IT and technical counterparts by providing a platform that enables them to access data used to manage audiences and campaigns without requiring them to submit an IT ticket. Marketing teams that deploy the right customer data platforms can dramatically accelerate their test-and-learn cycles since campaign KPIs become available much more quickly—in a matter of minutes, not days.

REDUCE ENGINEERING COSTS

Many marketing organizations rely on their company's engineers to build and maintain data pipelines across dozens of data sources to obtain a 360-degree view of customers. The work of stitching and unifying disparate data sources together is tedious and time-consuming. However, without a single source of truth, organizations are forced to pull away data engineers from their focus areas to build a unified view of the customer.

To put the potential upside in perspective, half of the marketers using Snowflake have over 20 sources of customer data. A purpose-built cloud data platform can eliminate data silos and avoid the need for high engineering costs by eliminating the "stitch-together" problem.

SURFACE AND ACCELERATE INSIGHTS

Purchased data, website traffic data, email and mobile app data, paid media data, and loyalty program data might all be stored in different places, making it difficult to track and analyze customer journeys. Companies need a single source of truth capable of harnessing all customer data in the same location as the enterprise data, such as ERP, financial data, and point-of-sale data. A customer data platform should conform directly to an organization's full data set—not the other way around.

Companies require access to faster, more accurate reporting that leads to better decision-making. Specifically, they need to be able to gauge how campaigns are performing with granular audiences, identify underperforming segments, and quickly adjust the copy or creative as needed. Snowflake customers who have unified all their data in Snowflake are running reports 60 times faster than they were able to historically, which powers real-time campaign optimization.

So, once you have examined (or reexamined) your organization's overall business goals and your CDP priorities, it's time to take a closer look at what functionality will get you there successfully.



CUSTOMER DATA PLATFORM CORE FUNCTIONALITY

CDPs mean different things to different people. This is understandable, as many teams frequently have apps that deliver part of the core functionality traditionally executed by a CDP and since different teams may optimize their stacks for slightly different goals or goals that change over time. Once your high-level strategy is aligned with your organization's top-line goals, you can dive into actual CDP offerings and your options for getting to customer 360.

Cloud data platforms have unlocked new possibilities for customers and providers that were not feasible several years ago. To provide clarity into possible implementations of customer data platform strategies, it's important to focus on core functionality. At a high level, CDPs' core functionality ranges across six capabilities:

- **Data Collection:** They ingest first-party customer data from dozens or even hundreds of sources, including identifiers such as emails or device IDs, as well as demographic or psychographic information
- **Identity Resolution:** They consolidate profiles on an individual basis, tying attributes to identities
- **Customer 360:** A place to store that data and enable data enrichment to create a comprehensive and unified view of a customer

- **Segmentation:** Functionality that enables a marketer to create subsets of prospects/customers to market based on common habits, needs, or characteristics
- **Data activation:** Takes an organization's stored data in their central repository and activates it to channels or applications used by internal teams or accessed by customers
- **Analytics:** Produce analytics reports that provide insights into consumer behavior and the customer journey

Not all customers require the full scope of all this functionality. Some likely will prioritize specific functionality aligned to their business objectives. The following figure shows the correlation between six core capabilities delivered by customer data platforms and the business outcomes that typically drive their adoption:

		BUSINESS OUTCOMES			
		Personalization	Marketing Team Productivity	Engineering Productivity	Accelerating Decisions
FUNCTIONALITY	Data Collection	Low	Low	High	Low
	Identity Resolution	Medium	Low	Medium	Low
	Customer 360	Low	Medium	High	Medium
	Segmentation	High	High	Low	Low
	Data Activation	High	High	Low	Low
	Analytics	Low	Medium	Low	High

Figure 3: How core capabilities correlate with business outcomes

PUSHING PERSONALIZATION TO MARKETING CHANNELS AT SCALE AND HOW AI CAN HELP

By pushing data out to marketing channels, customer data platforms and activation platforms enable marketers to send personalized, laser-focused content, offers, and experiences to audiences. To make that happen seamlessly, you need to find a way to connect customer data to your CRM, email platform, advertising channels, finance and ERP systems, and other SaaS applications.

Nearly all modern customer data platforms—both packaged and composable—allow you to leverage pre-built connectors to platforms such as Google Ads, Meta, and popular email systems. Then, once you create a segment (for example, high-value customers), it will be kept up to date across email, digital ads, and other channels, even as its underlying composition changes. Importantly, when a customer 360 is built out in a centralized data platform, both options offer near full autonomy to marketing teams and remove any dependency from IT or technical counterparts by providing intuitive UIs that streamline audience creation, segmentation, and activation.

Machine learning (ML) technology can advance your personalization initiative in several important ways, such as informing decisions about media spend, channel mix, merchandising, and customer experience. Some CDPs leverage built-in ML models powered by structured data sets that virtually every marketer has, such as email touchpoints. A marketer could determine the propensity of specific audiences to open an email as well as an email campaign's expected open rate and click-through rate.

If companies want to uncover insights into areas that are more unique to their business, it's necessary to make an investment in proprietary ML models. The potential upside is extremely high. Companies now harness predictive analytics to identify look-alike segments with the attributes of high-value customers and target ads and offers to them, to identify existing customers at risk of churn and proactively improve their experience, and so on. They can also dramatically improve product recommendations on their websites, apps, and other touchpoints by using affinity scoring models to gauge what will likely interest people based on what they've looked at in the past (since the content surfaced will be fresh and different, this tactic can drive much higher engagement than retargeting).

NEXT STEPS

If you design (or update) your customer data platform thoughtfully, your ROI can be significant, and aligning your required feature sets to current business objectives will guide the best path forward. Determine whether your organization will benefit from the investment in proprietary ML technology or whether you can leverage built-in models from out-of-the-box solutions to accomplish your goals. Ultimately, designing or modifying your platform as a modern CDP running on Snowflake should offer you the most extensible, flexible, and future-proofed way to activate your campaigns.





ABOUT SNOWFLAKE

Snowflake delivers the Data Cloud—a global network where thousands of organizations mobilize data with near-unlimited scale, concurrency, and performance. Inside the Data Cloud, organizations unite their siloed data, easily discover and securely share governed data, and execute diverse analytic workloads. Wherever data or users live, Snowflake delivers a single and seamless experience across multiple public clouds. Snowflake's platform is the engine that powers and provides access to the Data Cloud, creating a solution for data warehousing, data lakes, data engineering, data science, data application development, and data sharing. Join Snowflake customers, partners, and data providers already taking their businesses to new frontiers in the Data Cloud. [snowflake.com](https://www.snowflake.com)



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