

CDP Market Guide

Revealing Which CDPs Power Personalization at Scale

Inside You'll Learn

- Five types of customer data platforms, classified by their pedigree
- How to compare the five types of CDPs based on their capabilities to support personalization at scale
- The cost, operational, and revenue impact of choosing a retrofit CDP versus a purpose-built CDP



Marketing Performance Will Continue to Lag Without Personalization at Scale

As a marketer, you're tasked with achieving substantial goals for customer retention and growth. However, a recent McKinsey <u>survey</u> found marketers' ability to produce results appears limited with only 45% of CFOs believing their CMOs are delivering on their growth agenda.

In pursuit of more traction, marketers are turning to personalization initiatives—and with good reason. According to another McKinsey <u>survey</u>, 41% of retailers said implementing personalization initiatives drove a 50-100% increase in revenue, while another 15% saw revenues grow a remarkable 100-300%. Marketers also achieved up to 50% reduction in acquisition costs and a 10-30% increase in the efficiency of marketing spend.

Personalization at Scale Means More Than Traditional Personalization

Delivering personalization at scale requires extra sophistication. It's not simply about recommending experiences based on interactions in a single channel, nor from a discrete period of interactions. Instead, delivering personalization at scale means your customers receive contextually-appropriate experiences—no matter where they interact—because next-best-offers have been mined from their interactions across all channels.

In your customers' eyes, experiencing personalization at scale means:

- You always know who I am and interact with me based on my entire history of interactions with your brand
- You communicate with me when and how I want you to, through my preferred channel of engagement
- You do things to surprise and delight me by introducing me to appealing offerings at the right price point
- You make life easier by remembering my preferences and alerting me about products, services, and updates of importance to me



Five Types of CDPs, But Only One Powers Personalization at Scale

The easiest way to classify a CDP is to examine its pedigree. More likely than not, the vendor has roots in a legacy marketing technology, such as site personalization, tag management, or marketing execution.

Of the five types of CDPs on the market today, four are retrofitted solutions from previous technologies, and one is designed purposely from the ground up.

Retrofit "CDPs"

Retrofit "CDPs" come from vendors repurposing their legacy products to survive in an overpopulated marketplace. Behind the facade, their solutions are adaptations of ten-plus-year-old architectures that served different purposes. These retrofit "CDPs" fall into one of four categories:





Of the five types of CDPs on the market today, four are retrofitted solutions from previous technologies, and one is designed purposely from the ground up.

Retrofit "CDPs" consistently underdeliver on personalization at scale. That's because today's marketers require **agility**, **accuracy**, and **automation** in their personalization operations (let's call them the three A's). Retrofit "CDPs" restrain marketers from realizing the key outcomes of the three A's: near-zero reliance on IT (i.e. agility), correctness of predictive recommendations (i.e. accuracy), and auto-optimizing campaign execution (i.e. automation).

Purpose-built CDPs

Purpose-built CDPs, on the other hand, consistently deliver personalization at scale. That's because they offer a data-first approach and act as the stack's "smart hub" for centralizing data, democratizing access for analytics, and automating intelligent personalization processes. McKinsey recently echoed the importance of this solution in the martech stack, saying:

"Personalization is impossible if marketers don't have the means to understand the needs of customers on an ongoing basis. Setting up a centralized customer data platform (CDP) to unify paid and owned data from across channels is essential to these efforts."



How to Compare the Five Types of CDPs

Using three criteria defined below—wherein "Unify" is highlighted as the most critical due to its impact on the other two—we'll analyze how the five aforementioned CDP categories compare at supporting personalization at scale:

CRITERIA

CAPABILITIES



Unify

Unify and match all event-level interactions across online and offline channels, creating a single customer view

Data Collection

Ingest, cleanse, and store 100% of customer data *breadth*—from all online and offline sources via batch, API, or streaming—as well as the full *depth* of event-level historical data in your preferred cloud environment

Identity Matching

Resolve, authenticate, and dedup customer records through configurable, deterministic, and probabilistic matching techniques

Analyze

Democratize insights, increase organizational agility, and augment human intelligence with AI to support 1:1 personalization

Self-Service Usability

Enable business users to self-serve insights, audiences, and targeting with defined permissions and governance controls

ML-Based Decisioning

Perform advanced analytics and operationalize ML-based models across the entire history of customer behaviors

Activate

Orchestrate, test, and measure personalized experiences across all customer touchpoints

Orchestration

Orchestrate ad-hoc, triggered, or journey-based experiences from a single UI to all marketing, service, and sales touchpoints, in real-time

Optimization

Configure tests across any channel and measure performance using configurable business metrics or machine-learning algorithms that automate experience optimization



Digital Event Distribution Platform "CDPs"



Digital Event Distribution Platform "CDPs"





Their Pedigree

Digital event distribution platforms (DEDPs) come from a heritage of tag/SDK management. Like tag management solutions, they are designed to pipe data from one technology to another once a digital event has occurred. These SaaS platforms include: a user interface to configure if/then logic for when data transfers should begin from the source technology; a large collection of prebuilt APIs that transfer the data; and a configurator to assign the final destination of said digital event data.

DEDPs are repositioning themselves as customer data platforms because marketers have a bigger need for single-customer-view solutions, ones that orchestrate intelligent personalization rather than simply piping data from one place to another once a digital event has occured.

Use Cases They Excel At

Real-Time Data Transfers

Organizations seeking simple data transfers between disparate technologies—such as triggering content IDs from your content management system to your workflow management tool once content has been created, or triggering your ESP that a frustrated customer called the contact center—can reduce repetitive, manual ETL by deploying a digital event distribution platform.

Saving IT Development Costs

IT departments typically deploy DEDPs to reduce the number of APIs that in-house developers need to build. To stretch their appeal to marketing analysts, vendors have created user interfaces to configure simple API-based data feeds.



Integration Platforms' Feature Limitations

CRITERIA CAPABILITY EVALUATION SCORE **Data Collection** Unify Prebuilt APIs to collect digital data in real time Basic ability to improve data quality via UI X No persistent data storage for unlimited historical data (designed to store 90 days of data; the rest is stored in cold storage) IT assistance still required to configure APIs to legacy or offline systems **Identity Matching** Basic deterministic matching capabilities (key-to-key) No native probabilistic matching X Limited best-value determination given absence of historical data (e.g. determining customer's preferred address) **Analyze** Self-Service Intelligence Simple, rule-based filtering for audience segmentation No complex segmentation since historical data is not stored X No algorithm-based segmentation No ability to gain deep customer insights because of minimal storage of event-level data **ML-Based Decisioning** No machine learning models (e.g. churn, affinity, etc.) No omnichannel customer journey intelligence

Activate Orchestration

- ✓ Hundreds of prebuilt APIs to distribute digital data in real time
- Can only activate triggers, not design, orchestrate, or automate omnichannel campaign journeys

Optimization

- Simplistic campaign testing and no campaign measurement
- No campaign self-optimization features





Why They Fail to Deliver Personalization at Scale

Agility Marketers will continue to require technical resources for unifying,

storing, and democratizing customer data since DEDPs do not

store unlimited event-level data in their UI-enabled database.

Accuracy Marketers will not be able to optimize their customers' experienc-

es through predictive insights such as content preferences, nextbest-offers, or lifetime value scores since DEDPs lack predictive

models.

Automation Marketers will have to rely on simple triggers from digital behav-

iors (e.g. customer abandons cart, notify ESP to send him/her an email) instead of seamless, experience-adapting journeys since

DEDPs lack journey automation features.

Business Impact of Choosing a Digital Event Distribution Platform as Your CDP

Costs Marketers will be required to license additional technologies that

create the single customer view (e.g. big data platform, identity resolution software), enable customer analytics (e.g. analytics software), and support campaign orchestration (e.g. journey man-

agement software).

Operations Marketers will be forced to learn multiple pieces of software and

arrange hand-offs between users during personalization operations, while leaning on technical resources to sync data definitions, coordinate technology integrations, and train technical employees

to manage their upkeep.

Revenue Marketers will miss opportunities to gain incremental revenue by

not having predictive recommendations or intelligent campaign

journeys.



Identity Management Platform "CDPs"



Identity Management Platform "CDPs"







Their Pedigree

Identity management platforms were designed as a solution for IT to store customer interactions from online and offline channels in a persistent database, while resolving multiple representations of the same customer into a single "golden record."

Identity management platforms are repositioning themselves as CDPs because marketers desire data democratization, predictive insights, and campaign orchestration beyond the single customer view that ID management platforms offer.

Use Cases They Excel At

Deduplicating Customers

The ability to resolve two or more records of the same customer into a golden record through deterministic and probabilistic matching.



Identity Management Platforms' Feature Limitations

CRITERIA CAPABILITY EVALUATION SCORE **Data Collection** Unify No limitations on data storage, although costly since often stored on-prem Often lacking widespread offering of prebuilt APIs **Identity Matching** Sophisticated deterministic and probabilistic methods for identity resolution **Analyze Self-Service Intelligence** Basic segmentation capabilities (e.g. rule-based) No sophisticated analytics features for segmentation (data must be ported to separate analytics tool for analytics needs) **ML-Based Decisioning** No built-in ML since data must be ported to analytics tools No journey analytics **Activate** Orchestration Ability to create rules for campaign exports No embedded journey design or campaign automation (users must rely on ancillary tools within the vendor portfolio) Limited out-of-the-box integrations for data syndication Optimization No testing, measurement, or campaign optimization capabilities within the CDP solution

Note: In November 2019, Amperity acquired Custora, a customer analytics and marketing automation platform, to bring needed analytical and activation capabilities to their offering. Challenges ahead lie in system integration (different designs, different infrastructures, different code bases) and in elevating Custora's analytic models to the enterprise level (currently prebuilt, low-configuration models, versus the customized-for-you, white-box models that enterprises prefer).



Why They Fail to Deliver Personalization at Scale

Agility While marketers have access to complete customer profiles, their

ability to be self-serving is limited. That's because users must rely on technical resources or adjacent technologies in the vendor's portfolio for predictive insights, campaign orchestration, and jour-

ney automation, undermining the agility of a one-stop-shop solution.

Rule-based audience targeting and recommendations are less accurate than using predictive intelligence to score customers based

on content affinities, channel preferences, and lifecycle predic-

tions.

Accuracy

Automation Marketers can schedule basic audience exports but cannot design

set-and-forget campaigns, nor construct multi-step, self-adjusting

journeys.

Business Impact of Choosing an Identity Management Platform as Your CDP

Costs Buyers of this technology often need to augment their stack with

an integration platform, a customer analytics tool, and a journey automation tool—at minimum—in order to support scaled personalization objectives. But even in such a case, additional technical resources would be needed to integrate, upkeep, and enhance

them.

Operations Marketers would not be able to ideate a campaign, identify the

optimal audience, and orchestrate the campaign within a single solution, instead requiring 3-4x the number of hand-offs between

teams and technologies.

Revenue With three to four times the number of hand-offs between one's

identity management platform and the adjacent intelligence and orchestration systems, marketers are subjected to missed revenue

from slow time-to-value.



Digital Personalization Engine "CDPs"



Digital Personalization Engine "CDPs"







Their Pedigree

Digital personalization engines have a heritage in executing marketing, specifically within website personalization and optimization. Their architectures prioritize real-time speed and simplicity vs. sophisticated omnichannel decisioning.

Vendors have begun repositioning their products as CDPs because marketers are demanding two capabilities: first, a single-customer-view across all marketing, service, and sales channels—not just their web applications; and second, personalized experiences across all channels—not just their web channels.

Use Cases They Excel At

Basic Recommendations

The delivery of content recommendations in web and mobile channels from canned, one-size-fits-all algorithms.

UX Testing

The design and execution of user experience tests on websites and mobile apps to optimize page layouts and feature offerings.



Digital Personalization Engines' Feature Limitations

CRITERIA CAPABILITY EVALUATION SCORE

Unify

Data Collection

- ✓ Large quantity of prebuilt APIs
- Can store unlimited data (but not surface it all since it's stored in a separate, non-UI-accessible database)
- Heavy IT assistance is required during deployment and use as event data must be pre-transformed, preformatted, and summarized into a limited data model
- PII is often not stored in-system, requiring syncs and integrations with another system for PII-reliant messaging (e.g. direct mail)
- × System is vulnerable to sync issues between its databases

Identity Matching

- Deterministic matching capabilities
- X Limited (if any) probabilistic ID matching

Analyze

Self-Service Intelligence

- UI includes pre-canned customer intelligence metrics
- X Limited data models means majority of event-level data is stored in a separate database, forcing marketers' reliance on IT to resurface attributes

ML-Based Decisioning

- Multitudes of prebuilt analytics models (e.g. churn, LTV, affinity, attribution, etc.)
- Some vendors include ability to ingest and productionalize homemade analytics models
- Analytics models are not white-box, meaning model performance cannot be explained
- X Analytics models have mediocre predictive power due to one-size-fits-all, pre-canned design and limited amount of event-level data serving as inputs





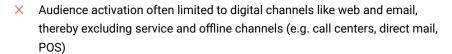
Digital Personalization Engines' Feature Limitations (Cont'd)

CRITERIA CAPABILITY EVALUATION SCORE

Activate

Orchestration

Ability to orchestrate ad-hoc, triggered, or journey-based experiences (often in real-time) from a single UI



X PII is often not stored in-system, necessitating integration with another solution for PII-reliant campaigns

Optimization

- Tests can be configured to understand higher-performing experiences and occasionally include features for self-optimizing journeys (albeit via simple, rule-based optimization)
- Campaign analysis, measurement, and iteration are limited due to minimal access to event-level data (IT resources required to resurface unforeseen data points)





Why They Fail to Deliver Personalization at Scale

Agility

During the iteration and optimization phases of campaigns (where the majority of marketers' time is spent), users' lack of access to infinite event data means they will not be able to act autonomously in customizing attributes, audiences, or journeys to improve their performance. Instead, they will have to go back to IT for assistance in resurfacing data that is stored in the digital personalization engine's separate 'data lake' database, and then redeploy that data into the configured data model that the UI accesses. The end result is iterations occur in days or weeks instead of in seconds.

Accuracy

Because digital personalization engines have restricted data models in their UI-accessible databases, they do not contain every customer interaction that would serve as inputs for predictive modeling (resulting in models having weaker predictive power that lowers the accuracy of recommendations).

Additionally, digital personalization engines do not offer feature engineering to identify combinations of attributes that increase the predictive power of models. These two realities manifest themselves in marketers having less accurate content affinities, next-best-action recommendations, and churn predictions.

Just as importantly, analysts encounter frustration with explaining the performance (or underperformance) of predictive models since models are one-size-fits-all and black-box, offering little insight to the drivers of outputs (e.g. why a particular recommendation was served). Marketers' trust in models is thus reduced.

Automation

Because of the limited computing capacity of a digital personalization engine (wherein systems only store a subset of granular interaction data in order to maintain sub-second responses for real-time website personalization), they eventually plateau in terms of the number of omnichannel use cases they can support.

In order to accomplish a new use case, they have to either reduce the number of data inputs submitted into the personalization query, aggregate multiple granular data points into a summarized attribute, or stop supporting an existing use case to free up computing capacity for the new use case (or only run it during off-hour, batch processes). The end result is making trade-offs between use cases.



Business Impact of Choosing a Digital Personalization Engine as Your CDP

Costs

Buyers of this technology would need to hire dedicated IT resources to be on-call for marketers' unforeseen data needs. This is because marketers do not have foresight to all the future data points they'll need for campaign iteration.

If IT resources do not exist, marketers will not be able to refine and iterate their audiences, campaigns, and journeys.

Operations

Because marketers have to coordinate data model changes whenever they need to surface a new data attribute from the cold-storage database, marketers lack efficiency in their operations and are slower to market.

Revenue

Given the limited data that digital personalization engines can process (not store, but process), the relevancy of predictive recommendations in campaigns will be lower than what would have been produced by a solution with high predictive power from processing all attributes in their granular form. This manifests itself to marketers in having lower click rates, lower conversions, and lower revenue.



Marketing Cloud "CDPs"



Marketing Cloud









Their Pedigree

Marketing clouds have a legacy in managing and executing marketing content in channels like email, text, advertising, and social. They are a portfolio of point solutions—each originally designed to operate on its own—assembled together through vendor acquisitions.

Marketing cloud providers are now <u>touting</u> "CDP" offerings, having begun checking the box for each component of the CDP package, even if they fall short of a one-stop-shop solution.

Use Cases They Excel At

Multichannel Campaign Management

The design and delivery of marketing campaigns in various channels.



Marketing Clouds' Feature Limitations

CRITERIA CAPABILITY EVALUATION SCORE



Unify

Data Collection



- Can store unlimited data (but only in the single customer view database, not in the separate databases of analytics and orchestration tools)
- ✓ Data governance features allow increased consent metadata
- X Heavy IT assistance is required during deployment and ongoing use as event data must be pre-transformed, preformatted, and summarized into limited data models of each tool
- System is vulnerable to sync issues between its disparate databases and tools

Identity Matching

- Deterministic matching capabilities
- × No probabilistic/algorithmic matching

Analyze

Self-Service Intelligence



- Rule-based segmentation
- × No single interface for user operations (must use 3-4 separate tools)
- New attributes require 24 hours before use as unlimited event-level data is stored in separate database
- X Segmentation produces "estimates" from a sample of customer profiles instead of true counts

ML-Based Decisioning

- Pre-canned analytics models for churn, LTV, etc.
- Disjointed portfolio of tools means no consistent set of attributes exist across all for analytics and measurement



Marketing Clouds' Feature Limitations

(Cont'd)

CRITERIA CAPABILITY EVALUATION SCORE

Activate

Orchestration



- Customer experiences are delivered by final-mile execution tools within the marketing cloud (e.g. ESP, social, CRM, DMP, personalization engine)
- X Final-mile execution tools are minimally integrated and lack efficient access to the masses of customer data stored in the data layer
- X 3rd-party data connectors are scarce as vendors are inherently motivated to develop integrations among their tools instead of connecting to outside vendors

Optimization

- ✓ Tests can be configured to understand higher-performing experiences
- Measurements often lack accuracy due to data inconsistencies across channel-designed tools
- Campaign analysis, measurement, and iteration are limited due to minimal access to event-level data (IT resources required to resurface unforeseen data points)



Why They Fail to Deliver Personalization at Scale

Agility

Because marketing cloud "CDPs" are disjointed in their architecture (as they are underpinned by non-homogenous code bases and data schemas), marketers lack the freedom to act with independence from IT assistance.

For example, when iterating a campaign through the use of new attributes, IT resources are often required to port attributes from the data layer to the activation layer (which have <u>separate databases</u>), slowing marketers' speed-to-iteration.

Accuracy

Marketing cloud "CDPs" lack computing power to process unlimited customer data, limiting the predictive power of models and stymying the accuracy of customer intelligence.

For example, users' segmentation queries are run against a <u>sample of the customer base</u>, returning an "estimated" audience rather than a known size (requiring a back-end query to actually discover whether the full audience exists).

Automation

Marketing clouds' complex infrastructures and lack of integration among tools make automation difficult.

For example, when a user needs a new profile attribute to be created, it can take <u>up to 24 hours</u> after creation in the data layer for it to be available for analytics or activation (a database refresh is required).



Business Impact of Choosing a Marketing Cloud as Your CDP

Costs

Beyond the high costs of marketing clouds, the costs for data collection are significant as well. For example, in order to ingest non-marketing-cloud data into the solution, organizations must embark on expensive integration projects (either through building their own APIs, paying the vendor extra to build them for you, or procuring an integration platform).

Additionally, the same API concerns exist for delivering an experience out of the solution.

Operations

Marketing clouds require licensing of multiple tools to <u>unify</u>, <u>analyze</u>, <u>and orchestrate</u> audiences, resulting in inefficient operations as users pivot back and forth between tools instead of having a single 'command center' UI.

Revenue

With 67% of marketers <u>adapting their tech stacks</u> on a quarterly or monthly basis to fulfill innovative use cases, marketing clouds discourage the benefits of a best-of-breed tech stack by locking you into once-impressive-but-no-longer-cutting-edge technologies.



Purpose-Built CDPs



Purpose-Built CDPs

Their Pedigree

Purpose-Built CDPs have no pedigree as they were architected from inception with a singular purpose in mind—to assist scaled personalization by serving as the omnichannel brain of the martech stack.

Vendors' founders often come from a background in computer engineering and big data analytics, understanding their impact on creating agility, accuracy, and automation in personalization.

Use Cases They Excel At

Single Customer View

The collection and unification of omnichannel customer interactions into a single profile for each customer, accessible to all users and systems.

Personalization at Scale

The production of contextually-appropriate experiences — whenever and wherever a customer interacts — due to capabilities such as an integrated single-customer-view, predicted next-best-offers, and an omnichannel decision engine.



Purpose-Built CDP Features

White-box, customized-for-the-brand analytics models

Models leverage all event-level data as inputs

Activate

Orchestration

ML-Based Decisioning

- Orchestrate ad-hoc, triggered, or journey-based experiences from a single
 UI to all marketing, service, and sales touchpoints, in real-time
- X Rely on 3rd-party solutions for last-mile channel experience delivery

Ability to ingest and operationalize homemade analytics models

Optimization

 Configure tests across any channel and measure performance using configurable business metrics or machine-learning algorithms that automate experience optimization





Why Purpose-Built CDPs Deliver Unmatched Personalization at Scale

Agility Business users gain access to unlimited data through their UI to

act 100% autonomously from technical resources in analyzing customers, designing campaign journeys, and orchestrating expe-

riences.

Accuracy Because purpose-built CDPs compute unlimited customer data,

they generate predictive insights with high predictive power to maximize the accuracy of product, content, and channel recommendations, while also providing the ability to understand models'

drivers should they need to be explained.

Automation Marketers have the ability to design and automate campaign jour-

neys that self-operate and self-optimize given CDPs' unhindered access to all their customer data for testing, measurement, and

iteration-all without IT.

Business Impact of Choosing a Purpose-Built CDP as Your CDP

Costs Because purpose-built CDPs function as the brain of one's martech

stack, organizations can save money by utilizing lower-cost point solutions for final-mile campaign delivery, leveraging an agnostic "smart-hubs dumb-spokes" stack. This allows you to future-proof your organization with a nimble technology infrastructure that easily adapts to the changing demands of your business and incorpo-

rate the innovative technologies arising to support them.

Operations Because purpose-built CDPs allow marketers to act autonomously

from technical resources, organizations can save upwards of 80%

of marketers' time in campaign lead time.

Revenue Purpose-built CDPs connect and automate the personalization

process from customer data unification and intelligent decisioning to the orchestrated activation of omnichannel customer experiences. In fact, a <u>recent Forrester survey</u> found organizations that use a CDP effectively are 2.5x more likely to have increased cus-

tomer lifetime values.



Platform Comparison Cheat Sheet



Cheat Sheet: Vendors' Capabilities

This cheat sheet summarizes the pros and cons of various types of CDPs.

Criteria	Purpose-Built CDP	Digital Event Distribution Platform	ID Management Platform	Digital Personalization Engine	Marketing Cloud
		## mparticle		dynamic evergage Lytics	Adobe ORACLE
Unify Unifying all customer data into a single customer view so marketers can access granular data from any channel	0		•		
Analyze Democratizing data access and employing human and machine-learning intelligence to derive insights and support 1:1 personalization	0			•	
Activate Activating personalized experiences across marketing, service, and sales channels with the ability to easily test, measure, and optimize	•				3



Take the **Next Step** in Your CDP Evaluation

Don't make the same mistake that others have. A recent MarTech Advisor <u>survey</u> found the #1 reason for a failed CDP deployment was a lack of sound use cases. ActionIQ can help you understand the <u>specific use cases</u> a CDP fulfills for your organization—before rushing off to evaluate vendors or committing to a deployment.

Contact us for a no-strings-attached consultation with a marketing technology expert.

Information Sources

- Interviews with ActionIQ clients (especially those who were previous users of other vendors' "CDPs")
- · Interviews with prospective CDP buyers
- Interviews with consulting firms
- · Vendors' websites, product documentations, and blogs
- Industry analyst publications (e.g. Third Door Media, The Relevancy Group, Customer Data Platform Institute)

About ActionIQ

ActionIQ empowers the world's leading brands to win in today's experience economy by building deeper, more valuable relationships with their customers. Our real-time orchestration and intelligence hub, powered by the fastest and most scalable customer data platform, enables marketers to quickly turn disconnected customer data into personalized experiences, orchestrated across all channels in real-time. The New York Times, Pandora, Gap Inc., WW, and more, trust ActionIQ to differentiate their brands, drive lasting customer loyalty, and significantly improve business performance — achieving up to a 20% increase in revenue in just a few months.

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