

March 2020

# Building a Foundation for a Data-Driven Customer Experience Future

## How to Align Customer Data Management Technology with Customer Experience Strategies

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## Executive Summary

Nearly a decade ago, advances in digital transformation and big data put achieving a 360-degree view of the customer on the roadmap for many organizations. Along the way, many companies focused their efforts on the experience layer, hoping to keep up with industry disruptors like Amazon and Apple, which have consistently raised consumers' expectations for what makes a great experience. As companies try to catch up, many miss the critical component behind this success: excellent customer data management.

The focus on the experience layer resulted in an explosion of MarTech categories and vendors, all of which are creating and consuming data at a record pace. But by focusing first-and-foremost on the experience layer, the underlying customer data infrastructure is too often neglected. With new data privacy regulations and exciting advances like machine learning, the Wild West days of ungoverned customer data are coming to an end.

In this newsletter, Tealium features the Gartner Report "Use Customer Data Management Technologies to Deliver Better Customer Experiences," which highlights some of the key questions and challenges facing companies struggling to manage customer data. Gartner brings together evidence from hundreds of client inquiries and from their annual CX Innovation Survey to understand how CX leaders are structuring their programs and how technology is aiding – or hindering – those efforts. With our comments, we hope to bring some clarity to organizations seeking to build a customer data management strategy and infrastructure to meet the needs of the modern enterprise today and in the future.



## Reining in the Wild West of Customer Data

Big data and the mandate to achieve a 360-degree view of the customer experience led – perhaps, inevitably, in retrospect – to where we are today: companies have too much data and no way of turning it into the expected omniscient understanding of the customer experience. Companies have managed to collect data about every bit of the customer experience thanks to the number of online and offline touchpoints available. All of this data, however, often ends up in the lawless lands of a data lake or remains siloed away in applications, with no single group taking holistic ownership over it.

As a result, according to research from Splunk and TRUE Global Intelligence, only 45% of the data companies collect ends up being usable. The other 55% winds up as “dark data,” which they define as “data that they know has been captured but don’t know how to use and data that they are not even sure with certainty that they have.”

In the first half of the 2010s, having all of this dark data had little impact on the customer experience, let alone the business – except perhaps running up cloud storage costs. But the passage of consumer data privacy regulations like the EU’s [General Data Protection Regulation](#) and the [California Consumer Privacy Act](#) made dark data and poor data management strategies a liability. The threat of fines and lawsuits with millions or even billions of dollars in potential damages have made managing customer data a priority for every company.

While lawmakers are pressuring companies to rein in their use of customer data from one side, on the other side are the consumers who are on the receiving end of bad experiences as a result of poor data management. Consumers increasingly expect real-time, personalized customer experiences – experiences that seamlessly blend the lines between different channels and departments.

With 97% of consumers somewhat or very concerned about protecting their data, 43% are still willing to hand over detailed data about themselves to a retailer for a discount.<sup>1</sup> Consumers expect good experiences, so long as companies proactively protect their data.

However, bad data management practices that result in dark data or silos hinder both good experiences and privacy efforts. As new forms of customer experience like IoT-connected devices become commonplace, the expected speed of customer experience will only accelerate. Connected consumers will begin to feel the sting of bad data management practices in this reality even more than today, because unruly data makes delivering real-time experiences categorically impossible.

## Principles to Guide Customer Data Management Initiatives and Technologies

With companies feeling the squeeze around their customer data management practices on two fronts – from regulators and consumers – it’s critical to craft a technology architecture that helps meet both demands.

<sup>1</sup>Source: Tealium, “How Brands Can Prioritize Privacy in the Age of Data”

As the following report states, there are “diminishing returns the more data you collect,” which is why there are six critical capabilities companies need from their customer data management technology to compete in today’s landscape: 1) capture, 2) prepare, 3) integrate, 4) store, 5) govern, and 6) analyze data.

No single technology will deliver all of these capabilities, but the right customer data management technology infrastructure can. The question is, how do you achieve these critical capabilities when so many different vendors promise to do these things? How do you sort the technological chaff from the wheat?

There are four guiding principles companies should follow when evaluating and choosing vendors to round out their customer data management stack to help break the cycle of silos and dark data that hold back customer experience improvements.

### **Focus on Data Integrity**

Data integrity, or the combination of data quality and governability, brings together the dual concerns of having usable data that’s protected and auditable.

For your critical customer data management infrastructure, your chosen vendors should be trusted partners, committed to maintaining transparency in how data is being prepared and where it goes. For some industries like healthcare and financial services, this means vendors should be willing to sign a Business Associate Agreement (BAA) and meet industry standards.

More broadly, it means finding the technology that helps remove the black box around how data moves through your organization. Technologies like Customer Data Platforms will play a large role in your customer data management because they help you solve the fundamental upstream data challenges (lack of visibility and auditability, slow and disjointed unification of data) before focusing on arguably flashier downstream challenges like channel-based personalization.

### **Think Cross-Departmentally**

The consumer journey is not a linear progression through a marketing and sales funnel into the post-sale experience. Today’s consumers jump from channel-to-channel, accessing content and experiences in diverse permutations.

To handle the rigors of customer data management today, you need to bring together the teams who are responsible for it at both a strategic and technological level. That means the usual suspects of marketing, sales, analytics, and customer service, but also IT and Legal, need to be working together to take down the technological and cultural silos.

Some organizations create a role like a Chief Data Officer to oversee this initiative, but even the most empowered CDO will need a cross-functional team of representatives to keep CX data from turning into noise.

### **Value Vendor-Neutrality**

As giant marketing clouds expand through acquisitions and partnerships to encroach upon customer data management infrastructure, there is



a risk that customer data will be swallowed up into walled gardens. While there is a case for the ease of a unified ecosystem, the reality is that today's customer experience stack is made up of dozens, if not hundreds, of point solutions that specialize in their domain.

Companies have invested untold dollars and hours on these technologies, which is why finding vendor-neutral customer data management technologies is critical. It not only reduces the frustration and costs of re-implementing those point solutions with compatible equivalents, it also allows companies to follow a best-of-breed approach to their tools.

### **Demand True Real-Time Capabilities**

It's no secret consumers demand real-time personalized experiences with brands now, but companies can struggle with this when the entire data supply chain isn't built on a real-time data foundation. Oftentimes, because data sits for hours or days in data lakes or warehouses before it is batched up (whether automatically or manually), the insights needed to provide a real-time personalized experience are already stale by the time they're ready.

Now, some customer experiences will not be taking place in real time, but when customers are ready to act, the data needs to be waiting in the wings. Since you can't control the customer journey, all you can do is prepare the technology driving your CX with the most complete view of the customer at all times.

### **Building a Foundation for a Data-Driven CX Future**

The customer experience is only going to become more complicated and taxing on the data management capabilities of enterprises as new sources of data – virtual reality, facial recognition software – and new privacy laws change how consumers interact with your company.

Luckily, there are customer data management technologies today that are setting the stage for that future. Customer Data Platforms, in particular, sit at the center of many modern Customer Engagement Hubs, because as Gartner highlights in this report, they unify “a company's customer data from marketing and other channels to enable customer modeling and optimize the timing and targeting of messages and offers.”

Since CDPs – or at least, CDPs that aren't just repackaged technologies latching onto a hot acronym – can touch the entire data set behind the customer experience and play a role in the deployment of personalization technologies, they're perfectly suited to sit at the center of a tech stack focused on both privacy and personalization initiatives.

CDPs will be critical going forward for companies invested in both these initiatives. In fact, 61% of CDP users believe the technology will be “absolutely essential” for complying with data regulations by 2025.<sup>2</sup>

<sup>2</sup> Tealium, “2020 State of the CDP Report”

But with the amount of data being generated by companies around the customer experience showing no signs of slowing down, advanced technologies like machine learning and artificial intelligence will be critical to ensure both data integrity and the scalability of data-driven customer experiences.

The tools you choose won't be a silver bullet. The best technology will be moot when your data layer remains unclear or, worse, undefined. If you haven't taken the time to define your data or created a data layer that is defined *on your company's terms* – not the terms of your vendors – we urge you to do this *now*. The unique data layer for your company will define how data passes between applications today and will lay the groundwork for how it moves into future technologies, like machine learning and artificial intelligence.

The growth of the alphabet soup of business technology shows no sign of slowing down, but when you start with the data first, you can focus on creating a harmonious, silo-free foundation for your ever-expanding collection of CX tech. Gartner's report in the following pages bring clarity to that ever-expanding world and reiterates the importance of a solid customer data foundation to the success of your customer experience initiatives.

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Source: Tealium





Research from Gartner

## Use Customer Data Management Technologies to Deliver Better Customer Experiences

Customer experience stakeholders know customer data is vital to improve customer experiences, but are unsure which customer data management technologies to use. Data and analytics leaders must help stakeholders clarify desired business outcomes, optimal use cases and relevant technology investments.

### Analysis

Optimizing the customer experience (CX) is a strategic effort for many organizations, especially in light of digital business transformation. Three-quarters of respondents to Gartner's 2018 Customer Experience Innovation Survey say their organization increased its CX technology investment in 2018. Customer analytics is still one of the biggest such investments, with about half of respondents planning to increase investment in these analytics in 2019. But organizations that fail to master the underlying customer data that is vital to the CX will lose those customers and market share to their rivals.

This research collection addresses three of the most common questions Gartner clients raise:

- How do we establish an optimal 360-degree view of our organization's customers?
- How do we evaluate and prioritize use cases to leverage customer data for business value?
- How do we identify and select relevant data management technologies that will enable these use cases and deliver value?

Data and analytics leaders, working in close collaboration with the chief data officer (CDO) or CIO, are uniquely qualified and positioned to take the initiative in terms of unifying their organization's customer data strategy and investments. This requires them to work effectively with stakeholders in multiple business units across marketing, sales, digital commerce and IT. By adopting an unwavering business focus on CX outcomes, they can clarify stakeholder requirements and align them with the necessary customer data management resources.

### Key Findings:

- Organizations often pursue a 360-degree customer view that sets wildly unrealistic expectations for collecting, normalizing and maintaining every scrap of available customer data.
- The bewildering array of tools and technologies for collecting, managing and analyzing customer data often has overlapping capabilities, which adds to the confusion.
- Customer data platforms (CDPs), personalization engines and multichannel marketing hubs present alluring alternative to marketers, CX leaders and commerce leaders seeking to unify customer data.
- Some organizations are building a “customer engagement hub” (CEH), an architectural framework that ties multiple applications together to optimally engage the customer through a real-time, personalized and contextual experience.
- Data and analytics leaders are uniquely positioned to enable their organization to leverage technology

for a unified view of the customer by shaping an overarching data strategy and deriving a detailed investment roadmap. They should prioritize use cases to link customer data and analytics with business outcomes.

The use of customer data is becoming more varied, growing in its importance for decision making, and permeating organizations. A large majority of respondents to the 2018 Gartner Data Integration and Synthesis Survey reported significant increases in both the quantity and diversity of customer data collected by their organization. A slightly larger majority (83%) reported relying more on customer data to make decisions (see Figure 1).

### Research Highlights

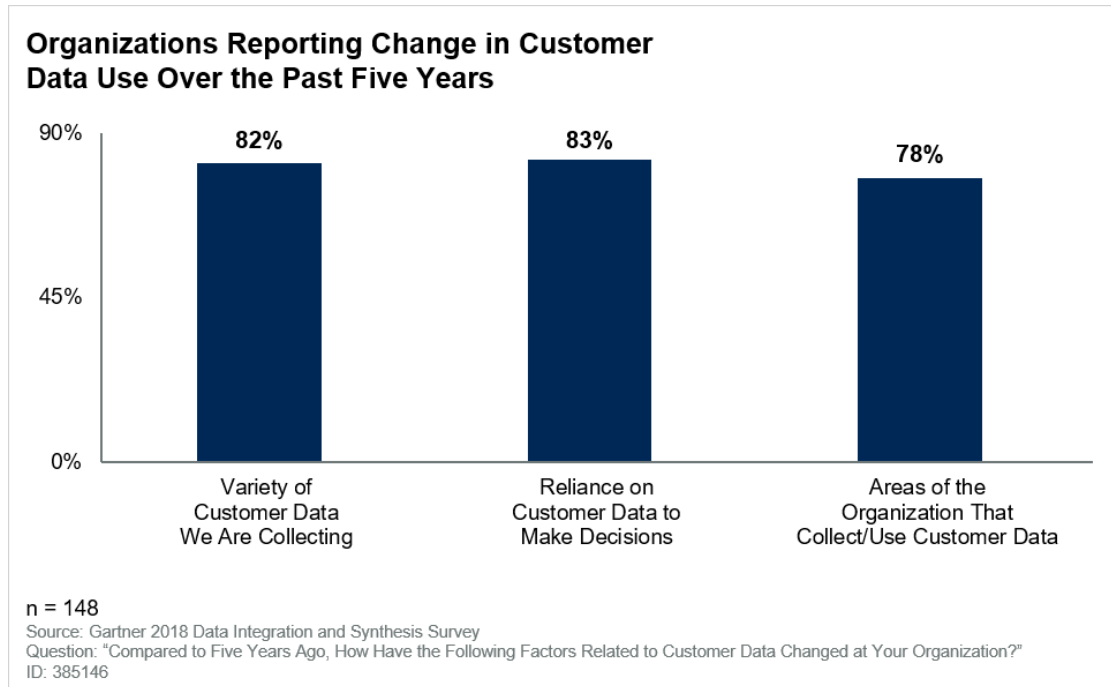
#### What Is a 360-Degree View and How Can It Be Used to Improve CX?

The CX is a key, often strategic, differentiator for many organizations. Delivering a meaningful and effortless CX can create and sustain customer satisfaction, loyalty and advocacy. It also increases customer lifetime value and improves profitability because it can cut customer acquisition costs and boost revenue.

***A 360-degree view is the output of a consolidated, integrated, exhaustive set of data relevant to a company's relationship with its customers or prospects. That dataset may need to include relevant information about customers' profiles, transactions, preferences, and relationships with other suppliers. Companies typically seek to build such a view to more effectively or efficiently improve the CX, retention, share of wallet, or sales.***



**Figure 1. Use of Customer Data Is Rapidly Changing and Expanding**



For most companies, achieving a complete 360-degree view of their customers is out of reach and not recommended, given the acquisition and integration costs for the necessary data. There are diminishing returns the more data you collect – more effort for increasingly limited benefit; it's difficult to achieve a 360-degree view while staying privacy-compliant and no one technology will deliver that view.

Strategies such as sharing customer data (unique customer identifiers, for example) or providing continuity between channels hinge on the ability to recognize individual customers and their interactions across channels. Before trying to achieve a 360-degree view of customers, organizations must aim to implement profile orchestration between CRM applications that maintain local copies of customer profiles.

Ideally, organizations should collect the minimum amount of data required to make a decision or personalize their CX. The goal should be to achieve a seamless, unified view that provides a continuous experience in order to recognize customers across different channels in a multichannel environment.

Potentially, an array of business functions, such as marketing, sales, fulfillment and service, can exploit a 360-degree view across an array of channels, including the web, contact centers, email, mobile apps and social networks.

In addition to the goal of achieving a better understanding of customers, a 360-degree view delivers the benefits of better orchestration of, and collaboration between, internal teams. These will positively impact the customer.

But these benefits can be undermined by several issues:

- A counterproductive insistence on – even an obsession about – collecting every possible data point about a customer.
- An unreasonable assumption that you have achieved a complete 360-degree view. If you believe you know everything there is to know, you create blind spots about the things you actually don't know.
- Inadequate data management and governance, which undermines the goal of using a 360-degree view to improve the CX.
- Conversely, opting for comprehensive enterprise master data management (MDM) solutions with associated time-, cost- and organization-related complexity, when a simpler solution would have sufficed to meet current goals.
- Compliance with privacy and security standards, which remains a key issue and concern.

Gaining a complete understanding of customers through data is impossible. Efforts to do so are potentially counterproductive because the organization focuses so much attention on obtaining “all the data” about its customers that it loses sight of why it wanted this data in the first place. It is important to recognize the diminishing marginal returns on extensive data collection. Instead, organizations should prioritize their use cases – the “why” – and collect the minimum amount of data required to support these. For example, Clorox found that, as it prioritized the data it used for personalization (and decreased the number of sources used), it saw higher returns on its personalization efforts.

***Data and analytics leaders should work with CX stakeholders to focus the 360-degree view on a subset of data that is directly relevant to individual customers – to personalizing their experiences – or to employees making decisions that affect customers.***

One of the biggest issues facing 360-degree-view projects is data management, because different business functions and use cases have different data requirements. Data and analytics leaders should apply different data scopes, governance rules and quality standards to customer data in order to create use-case driven, dynamically managed customer profiles. Data management infrastructure and processes must be flexible and adaptable. Data and analytics leaders are vital to coordinating and prioritizing CX stakeholder mission-critical outcomes and data requirements, so that they can establish optimal data management investments as part of a larger enterprise information management (EIM) strategy.

## **Prioritize Use Cases to Link Customer Data and Analytics With Business Outcomes**

Use case analysis ensures that customer data has a purpose, namely to realize a range of key business outcomes. At the same time, this analysis helps stakeholders identify specific customer data requirements that have to be satisfied by technology investments.

***The key question for customer data stakeholders is “What are your business goals and use cases?” The answer tells you what data you need, which in turn sets your technology priorities.***



Customer data varies widely between use cases and the desired outcomes, which may include acquiring new customers, doing more business with existing customers, and delivering customer service that assists customer retention. The use cases will also determine other data attributes: how accurate or current the data must be. Existing customers expect an organization to recognize them and their context; they don't want, for example, to receive marketing offers for products they have already bought.

Realizing the full value of each use case requires identification of the data an organization already has, and an understanding of its quality, currency and deficiencies. For a use case that is location-aware, an organization must capture customers' geospatial locations to create business value.

Among the typical use cases for customer data are:

- Recognizing customers, regardless of interaction channel.
- Increasing engagement through better matching of displayed content to customers' interest during search requests.
- Improving segmentation by customer intent, in order to understand and address customers' needs better.
- Increasing upsell/cross-sell transactions by improving product recommendations
- Improving advertising and marketing efficiency by suppressing advertising and marketing messages that customers have already received and/or that are no longer relevant.
- Enhancing service or support to address customers' product and service issues.
- Understanding the customer journey at each stage of interaction and of the customer life cycle (the buying or owning stages, for example).

360-degree-view projects typically have one of two isolated starting points, which often results in incomplete, separate or uncoordinated customer data outcomes for use cases:

- **Business teams:** Projects undertaken by these teams have a strong operations orientation, rooted in various business functions or units, with support from application leaders based in central IT teams or the local business. Customer data may be "trapped" within these individual teams, unusable for other key use cases, and lacking the protections, accuracy and reliability afforded by a disciplined enterprise data management strategy.
- **Data and analytics teams:** Projects undertaken by these teams typically have a strong analytics orientation, with a data architecture and a large data lake. Customer data is often not the primary initial focus, which is instead an internal enterprise view of data. Customer data becomes the focus only as business stakeholders discover this data and try to use it in specific use cases.

Data and analytics leaders should strive to bring together key stakeholders:

- CX stakeholders who have in-depth knowledge of customer data in all its intricacy and variety.

- Data and analytics stakeholders who have the technical expertise to manage customer data and ensure it is usable in multiple use cases for concrete business outcomes and measurable business value.

They should also ensure that the technology selected is optimal for the problem or business goal in question. With a myriad of options to choose from, the cost, time to value and intrusiveness to the business vary considerably.

### What Are the Data Management Technologies for Customer Data?

A focus on business outcomes enables data and analytics leaders to specify the relevant data management requirements, inventory the available capabilities and recommend the corresponding technology investments for customer data. Without such an approach, adopting multiple solutions with overlapping capabilities introduces business risks, such as:

- Redundant investments
- Increased cost
- Disjointed customer interactions across channels
- Erosion of the CX
- Underperforming business outcomes

The technology investments fall into three broad categories:

- Enterprise capabilities
- Customer-specific data processes

- Customer data infrastructure

### Enterprise Capabilities That Are Vital to Customer Data

Maximizing the impact of customer data requires enterprise data management capabilities that go far beyond the typical customer data application. To realize these capabilities, data and analytics leaders must initiate a strong, collaborative working relationship with marketing and CX stakeholders. Without such collaboration, the desired strategic outcomes for customer data will not be achieved.

EIM capabilities that are vital to customer data include those to:

- **Capture data:** The ability to find and properly extract customer data from all relevant existing sources.
- **Prepare data:** The ability to make data fit for your business use cases by performing tasks such as processing, transforming, ingesting, transferring and loading.
- **Integrate data:** The ability to link together data from various sources and to deduplicate data to create a unified data view.
- **Store data:** The ability to retain data to ensure its maintainability, performance, availability and efficacy.
- **Govern and steward data:** The ability to modernize data governance with an adaptive framework that can respond to new digital business needs.
- **Analyze data:** The ability to derive insights from the data that informs the next best action or another customer interaction.



Figure 2 shows the relevant enterprise data management technologies and their support for these essential tasks. For definitions of the technologies, see Note 1.

All these tasks require technology decisions that are likely to overlap with EIM strategies and existing enterprise systems, such as systems of record. Data and analytics leaders must address this overlap in customer data architecture. Some use cases or stakeholders may require parallel (or entirely separate) workflows, storage and data pipelines. An example is a data warehouse used to store persistent enterprise customer data assets that don't need to be accessed often, such as point-of-sale data.

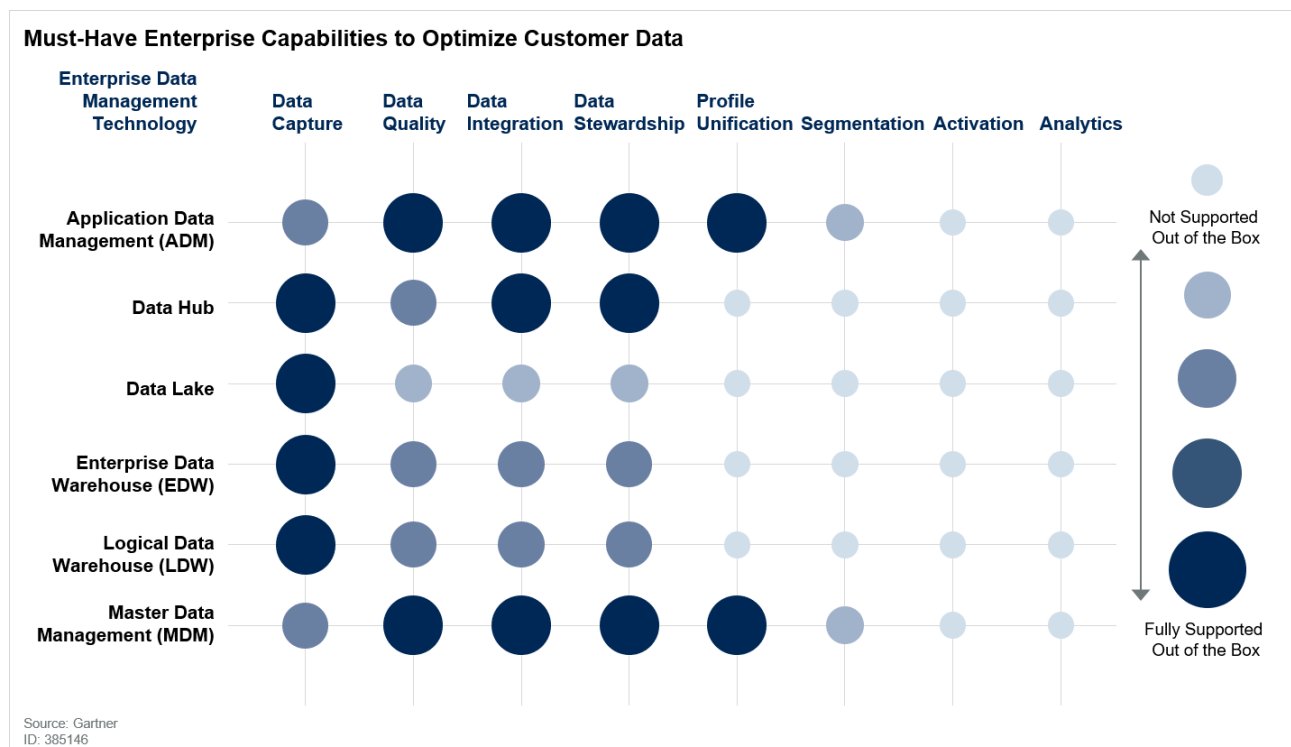
### Take Advantage of Customer-Specific Data Management Processes

Marketing, CX and sales stakeholders are aggressively deploying a range of technologies to address customer-specific data management processes. Data and analytics leaders must understand these processes, align customer data management demands with their organization's EIM infrastructure, and rationalize overlapping capabilities.

Among the key data tasks are:

- **Profile unification:** The ability to consolidate profiles at the person level and to connect attributes to identities. This must include linking multiple devices to a single individual, once that person has been identified, and deduplicating customer records.

**Figure 2. Must-Have Enterprise Capabilities to Optimize Customer Data**



- **Segmentation:** Rule-based segment creation or advanced segmentation features may include automated segment discovery, predictive analytics and propensity models, and the ability to import and deploy custom models.
- **Activation:** The ability to send segments, with instructions for activating them, to executional tools for email campaigns, mobile messaging and advertising, for example.
- **Analysis:** The ability to derive insights from the data that informs the next best action or other customer interaction.

Figure 3 shows relevant customer-centric data management technologies and their support for these essential tasks. Many vendors have opportunistically repackaged or repositioned existing capabilities as CDPs, and some have overlapping capabilities, which has caused still more confusion about the resulting

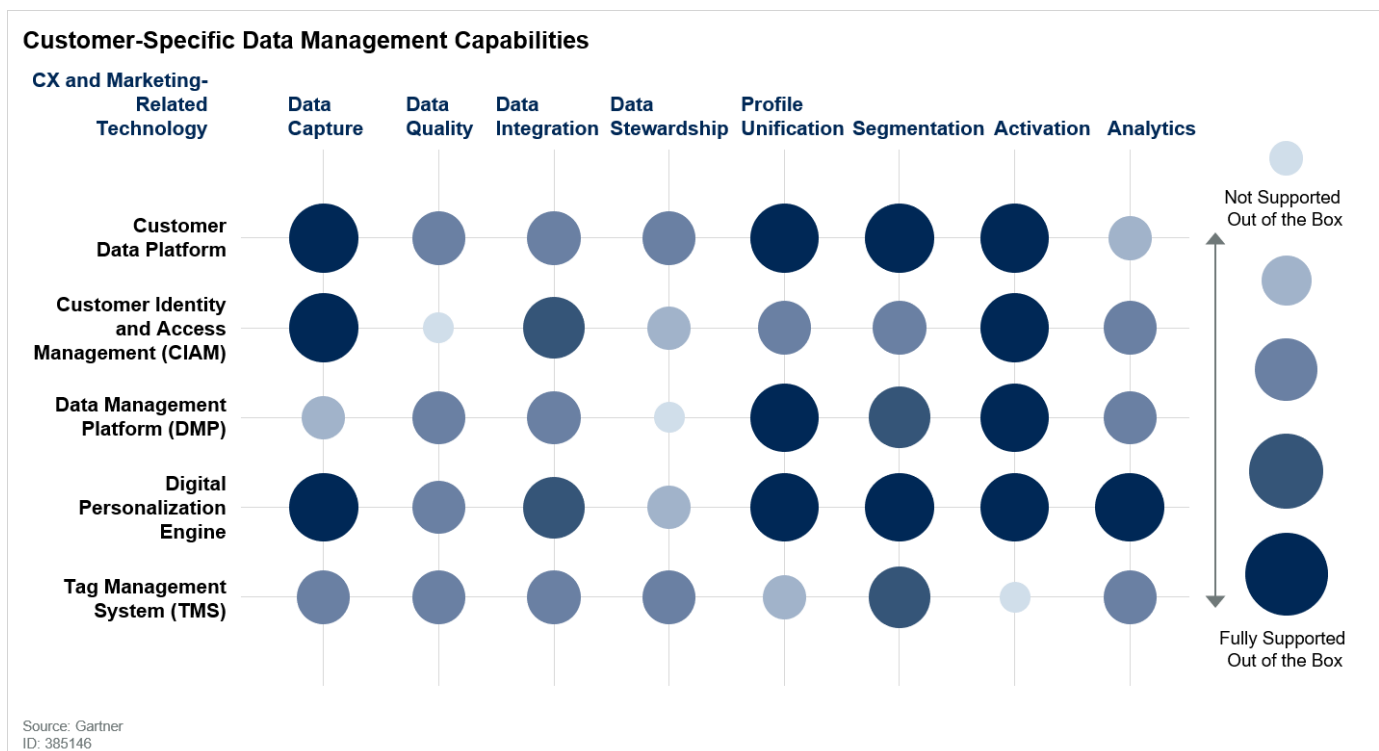
technology and feature overlaps. For definitions of the technologies, see Note 1.

### Don't Confuse Customer Frameworks With Data Management Technologies

Several key customer technologies are too often misinterpreted as data management technologies. In reality, they are frameworks or design platforms. They play an important role in leveraging customer data, but they are not data management tools. Among the most important frameworks and design platforms are:

- **Customer engagement hub (CEH):** A CEH is an architectural framework that ties multiple systems together to engage customers optimally. A CEH enables personalized, contextual customer engagement, whether through a human, an artificial agent or sensors, across all interaction channels. It reaches and connects all departments, allowing, for example, the synchronization of marketing, sales and customer service processes.

**Figure 3. Customer-Specific Data Management Capabilities**





- **Customer relationship management (CRM):** Gartner defines CRM as both a business strategy and a technology category. As a strategy, CRM is about fostering customer-satisfying behaviors and implementing customer-centric processes. CRM application functionality can fall into five main categories: sales, marketing, customer service, field service and digital commerce.
- **Digital experience platform (DXP):** A DXP is an integrated set of technologies, based on a common platform. Organizations use DXPs to build, deploy and continually improve websites, portals, mobile and other digital experiences.
- **Multichannel marketing hub (MMH):** An MMH orchestrates a company's communications and offers to customer segments in a multichannel environment involving, for example, websites, mobile devices, social media, direct mail call centers, paid media and email.

Figure 4 shows relevant CX frameworks and design platforms and the support they offer. For definitions, see Note 1.

### Note 1

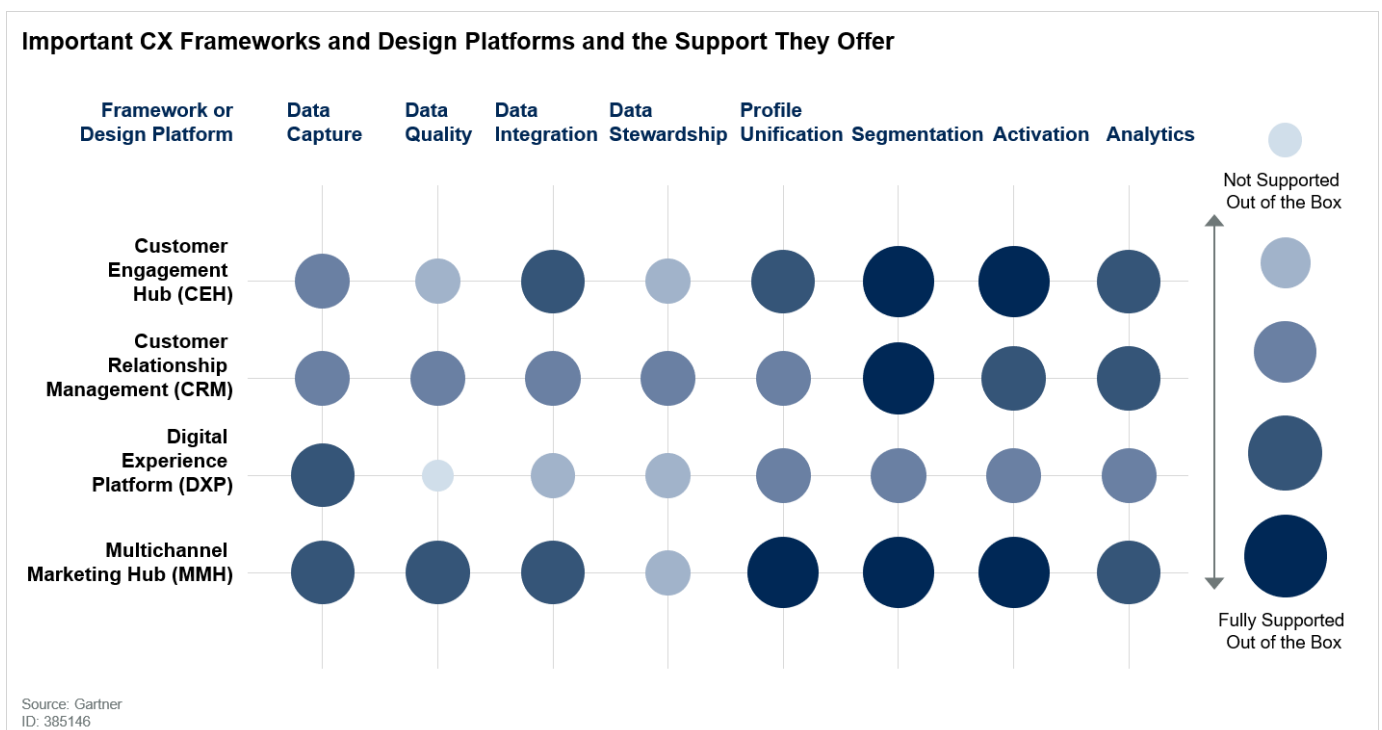
### Definitions of Customer Relevant Data Management Technologies

#### Technologies for Enterprise Data Management Capabilities

**Enterprise data warehouse (EDW):** An EDW is a storage architecture designed to hold data extracted from transaction systems, operational data stores and external sources.

**Logical data warehouse (LDW):** The LDW is a best-practice analytics data management architecture and design that combines the strengths of traditional repository warehouses with alternative data management and access strategies.

**Figure 4. Important Customer Experience Frameworks and Design Platforms and the Support They Offer**



**Application data management (ADM):** ADM is a technology-enabled business discipline in which business and IT work together to ensure uniformity, accuracy, stewardship, governance, semantic consistency and accountability for data in an application or suite (such as for CRM, ERP or supply chain management). Application data is the consistent and uniform set of identifiers and extended attributes of the data maintained and/or used within an application or application suite.

**Master data management (MDM):** A technology-enabled business discipline in which business and IT work together to ensure the uniformity, accuracy, stewardship, governance, semantic consistency and accountability of their enterprise's official shared master data assets. Master data is the consistent and uniform set of identifiers and extended attributes that describes the core entities of the enterprise, including customers, prospects, citizens, suppliers, sites, hierarchies and chart of accounts.

**Data hub:** A design pattern that layers data and analytics governance requirements upon information-sharing demands to establish the technology decisions needed for data integration.

**Data lake:** A collection of storage instances of various data assets additional to the originating data sources. These assets are stored in a near-exact, or even exact, copy of the source format. The purpose of a data lake is to present an unrefined view of data to only the most highly skilled analysts, to help them explore their data refinement and analysis techniques independently of any of the system-of-record compromises that may exist in a traditional analytic data store (such as a data mart or data warehouse).

## Technologies for Customer-Specific Data Processes

**Customer data platform (CDP):** A marketing system that unifies a company's customer data from marketing and other channels to enable customer modeling and optimize the timing and targeting of messages and offers.

**Customer identity and access management (CIAM):** The term "CIAM" refers to consumer-facing identity and access management capabilities, more specifically user registration, social login, and user profile and consent management.

**Data management platform (DMP):** A DMP is software that controls the flow of data in and out of an organization. It supports data-driven advertising strategies, such as segmentation.

**Digital personalization engine (DPE):** A DPE identifies the optimum experience for an individual, based on knowledge about them, for marketing, digital commerce and CX use cases.

**Multichannel marketing hub (MMH):** An MMH orchestrates a company's communications and offers to customer segments in a multichannel environment involving, for example, websites, mobile devices, social media, direct mail call centers, paid media and email.

**Tag management system (TMS):** A TMS simplifies the deployment and maintenance of JavaScript tags, used in online content to interface with applications such as web analytics, personalization and advertising. A single tag replaces all other tags and, after execution, a tag manager publishes other tags, based on business rules and a common data model. This decouples tag control and maintenance from the life cycle of other content, improves the speed of changes, enhances the quality of tags and provides an audit trail.

## Technologies for Customer Frameworks That Rely on Data Management

**Customer engagement hub (CEH):** A CEH is an architectural framework that ties multiple systems together to engage customers optimally. A CEH enables personalized, contextual customer engagement, whether through a human, an artificial agent or sensors, across all interaction channels. It reaches and connects all departments, allowing, for example, the synchronization of marketing, sales and customer service processes.

**Customer relationship management (CRM):** A business strategy that optimizes revenue and profitability, while promoting customer satisfaction and loyalty. CRM technologies enable strategy, and identify and manage customer relationships, in person or virtually. CRM software provides functionality to companies in four segments: sales, marketing, customer service and digital commerce.

**Digital experience platform (DXP):** A DXP is an integrated set of technologies, based on a common platform. Organizations use DXPs to build, deploy and continually improve websites, portals, mobile and other digital experiences.

## Evidence

- Hundreds of Gartner client inquiries across the areas of CX, marketing, commerce, sales and data management.
- Gartner's 2018 CX Innovation Survey was conducted online from February through March 2018, with 209 business and IT leaders across North America (n = 57), Western Europe (n = 50) and APAC (n = 102).

The aim was to explore how organizations structure CX programs, the technology and innovation drivers of those programs, CX investments, and ROI.

To qualify, respondents had to be one of the following:

- A leader who sets strategic objectives and priorities for CX project activities (71%)
- A member of a team responsible for achieving strategic objectives and priorities (20%)
- An influencer involved in decision making (9%)

Respondents also had to be knowledgeable about the specifics of their organization's CX activities in 2017 and those planned for 2018.

- Published research from Gartner analysts covering the fields of CX, digital commerce, marketing, sales, customer service, and data and analytics.

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*Source: Gartner Research, G00385146, Melissa Davis, Penny Gillespie, Nick Heudecker, Olive Huang, Lizzy Foo Kune, Benjamin Bloom, Kyle Davis, Bill Delrieu, 27 September 2019*





## Final Thoughts- Thinking Data-First

What's clear from this report is that, in order to turn customer data into a trusted asset for your customer experience initiatives, companies will require a combination of technologies. No single application will be able to do it all. When choosing your customer data management technology, it's important to build a complete customer data supply chain that can secure data from end-to-end – creation to activation. Whereas many companies prioritize the experience layer first, we prefer a data-first approach to ensure a solid foundation for every customer experience initiative.

We've been thinking about how to build a trusted customer data supply chain since we first started tackling enterprise tag management back in 2008. We created the Customer Data Hub to bring the entire customer data supply chain into a unified platform, combining tag management, an API hub, data storage, a Customer Data Platform, and machine learning. This approach has allowed innovative enterprises from every industry to build secure, adaptable, and real-time end-to-end data foundations.

Whatever solutions you buy, the make or break question will be how well they work together. That's why we designed the Customer Data Hub to be vendor neutral. Your data should belong to you – not beholden to the vendors who collect, store, or transform it for use.

When you take a data-first approach, you're able focus on the integrity of the data, the coherence of the data layer, and the security of your customer's personal information. With the fundamentals of customer data management mastered, you'll circumvent many of the perpetual headaches companies face as they grow and their technology changes.

As the customer experience changes, it's the data-first companies that will remain adaptable to it all, able to march to their own drumbeat – not the drumbeat determined by another company's product roadmap.

# About Tealium



Tealium connects customer data – spanning web, mobile, offline, and IoT devices – so brands can connect with their customers. Tealium's turnkey integration ecosystem supports over 1,200 client-side and server-side vendors and technologies, empowering brands to create a unified, real-time customer data infrastructure. The Tealium Customer Data Hub encompasses tag management, an API hub, a customer data platform with machine learning, and data management solutions that make customer data more valuable, actionable, and secure. More than 1,000 businesses worldwide trust Tealium to power their customer data strategies. For more information, visit [www.tealium.com](http://www.tealium.com).

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