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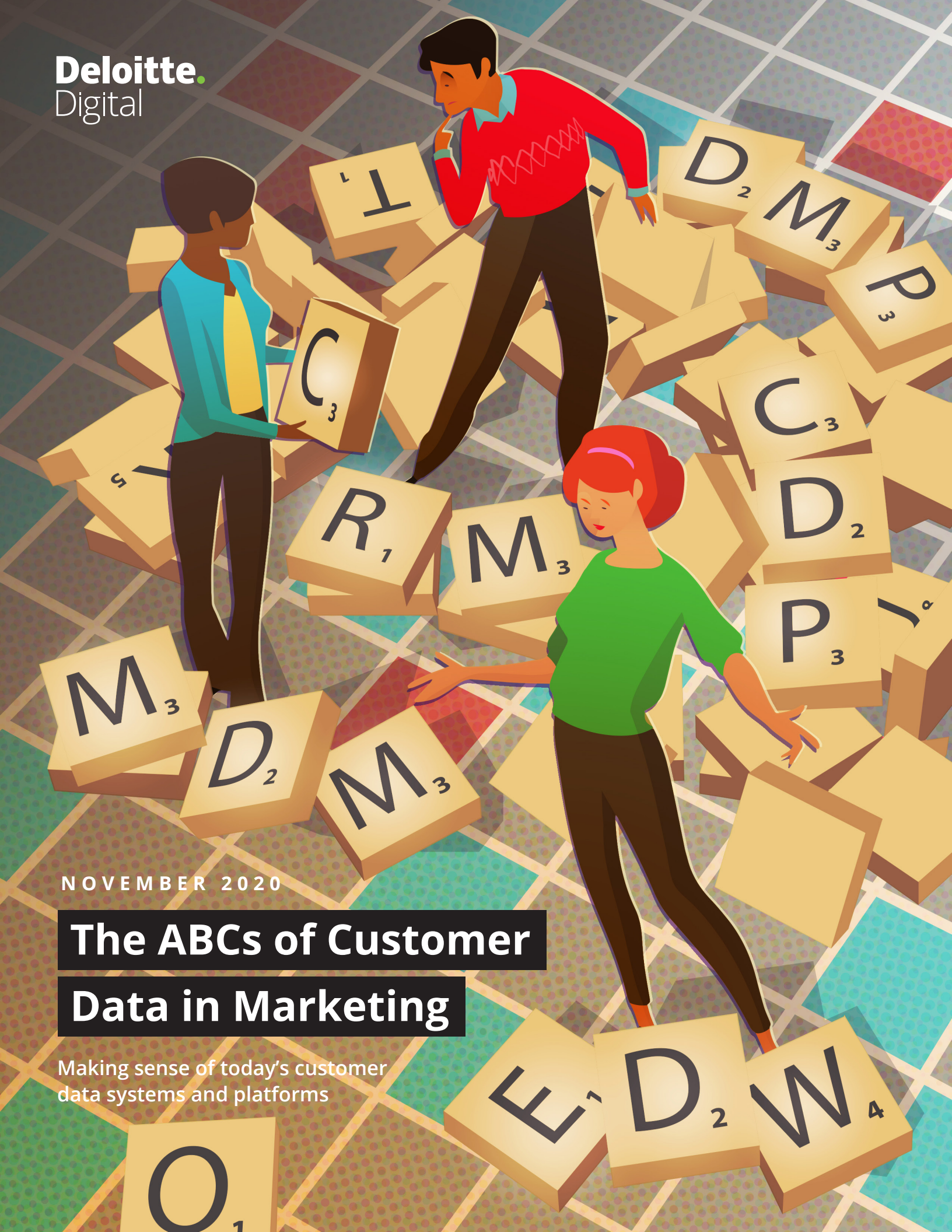

NOVEMBER 2020

The ABCs of Customer Data in Marketing

Making sense of today's customer data systems and platforms

THE ABCs OF Customer Data IN MARKETING

Creating deeper one-on-one connections with customers is increasingly important in today's hyper-competitive, data-driven marketing environment. To be able to execute a personalization strategy, you should focus on three things: complete and accurate **data**; intelligent **decisions** based on insightful analysis of that data; and precise **delivery** that converts decisions into effective action. And if companies want customers to share personal data to enable that strategy, they will need to prove themselves worthy of their **digital trust**.

The ways that you organize, sort, and derive insights from data have a direct, amplifying impact on the quality of your decision making and the effectiveness of the experiences delivered. But unfortunately, years of bolt-on systems and custom workarounds have left many marketing organizations with data that is highly siloed, fragmented, and difficult to access; and the solutions to those data problems are, themselves, an alphabet soup of Customer Data Management (CDM) technologies for marketing.

Customer Relationship Management and Master Data Management. Data Management Platforms and Customer Data Platforms. Enterprise Data Warehouses, Data Lakes, Customer Identity & Access Management…

It's enough to make your head spin.

Each customer data management technology services a discrete purpose. When working in harmony, they can deliver omnichannel insights and help marketers deliver personalized, relevant, and resonant experiences to customers. However, each vendor's offerings differ in both subtle and significant ways, creating additional confusion even as vendors often tout their product as a panacea for all customer data management challenges. This, especially, makes it hard to know what's what—and what works well with what.

This primer aims to help to spell out what each type of customer data management system is designed to do—and even more important, what it is not designed to do—so you can make informed decisions and extract more value from your customer data investments.

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Evolution of customer data

Most of today's systems related to customer data have sprawling capabilities that expand regularly as vendors seek to stretch the limits of what their products can help their customers accomplish. As a result, it can be hard for marketers to determine which tools will offer the best balance of must-have and nice-to-have capabilities at a reasonable price and scale, without creating unnecessary redundancies or inefficiencies between systems. Understanding what each type of system was originally designed to accomplish can be a helpful place to start. (*Figure 1*)

Enterprise Data Warehouse **(EDW)**

These systems were specifically designed to **aggregate and store data across the enterprise.** Real-world use cases vary from one organization to the next: Some treat their EDWs as centralized locations to aggregate the latest and greatest data, while others see the EDW as simply a place to send data to be stored, organized by business subject, and archived for a rainy day. The refresh rate for those multiple data feeds can range from real time to once a day, once a month, or even once a year. Consequently, while some treat their EDWs as central repositories for the latest and greatest data, many organizations treat their EDWs as centralized repositories for data to be organized and archived.

Master Data Management **(MDM)**

As data became increasingly important across the enterprise, organizations found themselves with a jumble of systems and data sources that were disjointed, redundant, and often conflicting. Master data management **is an attempt to bring order to the chaos by establishing a single master version of the truth for all data**—not just customer data, but all data domains across the enterprise.

As such, MDM approaches the customer data challenge at the enterprise level rather than solely through the lens of marketing. It creates a standardized "golden record" of commonly used attributes and data sets across the organization. However, from a marketing perspective **it may fall short of providing a full 360-degree view of the customer** that includes robust details on customer engagement and interactions. Though you can extend an MDM to build a complete customer profile, there are often less expensive options that require less time to stand up.

Customer Relationship Manager **(CRM)**

CRM systems were specifically created to **manage interactions of prospects and customers across sales and customer service** sitting on top of a database. Over time, some CRM systems expanded their scope to encompass a broader range of marketing features and customer touchpoints. However, their **data primarily revolves around known prospects and customers**—not comprehensive data or data for individuals the company has not already interacted with. Also, most systems are designed to address a set of sales and customer service use cases (e.g., what must be done next to make a sale, or how a customer support incident ticket can be resolved).

Data Managment Platform **(DMP)**

These systems were designed to **support the purchase and placement of targeted online advertising** by creating audience segments based on first-, second- and third-party data. Later, DMPs evolved to include personalization features that leveraged these audience segments effectively for additional use cases in other channels such as websites. As such, DMPs are a valuable piece of the customer data puzzle—but with a primary focus on expanding your reach to new and re-targeted audiences at an aggregate group level, **not at a truly personalized one-to-one level**. The future of DMPs is at a crossroads since the underlying platform ecosystem is based on cookie matching. Given industry announcements that call into the question of the viability of third-party cookies going forward, DMPs will need to pivot in order to continue to be a valuable piece of an organization's Customer Data Management (CDM) stack.

Customer Data Platform **(CDP)**

CDPs are designed to help you to bridge the gap between CRM, DMP, MDM, and EDW systems. Like MDM and EDW, CDPs were designed from the get-go to serve as integrated data repositories. However, unlike MDM and EDW, they **specifically focus on customer data and the needs of the marketing function**—giving you a powerful new tool to extract the most value from customer data. By integrating the customer data from the other systems and connecting the dots in new ways (for example, linking anonymous profiles to known customer profiles on a regular basis), a CDP can provide a single, integrated, 360-degree view of the customer. This enables breakthrough insights about customer behaviors, intents and preferences. It also infuses customer data into other systems in the marketing ecosystem—effectively making every system smarter about the customer in real time. There are many cloud-based CDP options, but **more organizations are looking for ways to host critical customer data behind their firewalls** in a private cloud of choice.

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Sources: 1. Deloitte Consulting, LLP, 2018; 2."Evolving from Data Management to Master Data Management." SAS Global Forum, 2012; 3."Advantages of Implementing an Enterprise Data Warehouse." Salesforce; 4."A Short History of Data Warehousing." Dataversity; 5."Brief History of Data Warehousing." Dataversity.

(*Figure 1 Cont.*)

Customer/Consumer Identity & Access Management **(CIAM)**

Whereas traditional Identity & Access Management (IAM) solutions were built to secure an organization's workforce and protect employee access to internal applications and systems, CIAM solutions focus on consumer needs as organizations leapfrog to digital, mobile and cloud. These systems aim to **provide organizations with privacy and access management solutions that are simple to use, compliant with local regulations, and highly secure across the customer journey**.

Several capabilities are common across IAM and CIAM solutions, including self-service and automated processes for access, identity administration, credential recovery, authentication and directory services. However, other capabilities are more unique to a CIAM solution, such as registration via social media credentials, the ability to gradually collect and connect user information over time across the buyer journey, and authentication across channels of engagement—as well as decentralized access control for business-to-business customers. These functions focus on giving customers more power and options for how and at what depth to engage. And in order to address rising consumer privacy expectations, CIAM solutions typically offer functionality like consent and preference management, and/or advanced authentication for individual rights management.

CIAM solutions can scale to support millions of customer/consumer identities and integrate—through identity synchronization and attribute exchange—with EDW, MDM, CRM, DMP and CDP solutions to provide marketing enrichment and a single persistent view of a digital identity. **While CIAM solutions serve an important role in building and preserving your customers' trust, they are not marketing tools per se** and do not directly produce insights that can lead to better decisioning and marketing delivery. Instead, CIAM enables organizations to identify high risk and high value touchpoints in a customer journey.

Data Lakes

These repositories allow for the aggregation and storage of various types of data (structured, unstructured, raw, curated) across all domains of the enterprise. If used properly a data lake **can be a critical source of rich data to be shaped and used by a variety of front-office and back-office systems**.

The centralized, comprehensive nature of the typical data lake can be a blessing or a curse for organizations. As more data becomes available, a well-defined strategy for managing and using your data lake becomes increasingly vital. Moreover, in order to keep the lake from devolving into a swamp, your strategy should constantly be adjusted to account for new sources of data and new ways of cleaning, connecting and using the data you have.

In short, having a data lake can be good—but having a clear strategy on how you want to use your data lake is better.

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Digging deeper into customer data systems

Each type of CDM system offers a distinct and important value to the marketing organization. And while certain features might overlap, no single system can truly handle all of a marketer's needs. To help you identify the platforms best matched to your core needs and use cases, here is a detailed summary that highlights some specific similarities and differences.

Figure 2. Customer Data Management (CDM) systems quick reference guide—

	EDW	MDM	CRM	DMP	CDP	CIAM	Data lake
Value Offered to Organization	**Serve as a centralized data storage repository for structured business data** for use with business intelligence and analytics tools.	**Master one or more data domains** for the enterprise. Mastering the customer domain means having one "golden record" for individual customer data that can be leveraged across the entire enterprise.	**Manage and enhance interactions** with current and potential customers across sales and service.	**Improve media spend** by managing audience data to find lookalikes and re-targeting through cookie matching. Can also help target curated audience profiles and discover new audiences.	**Support and empower marketing** by integrating data from other systems and generating persistent, unified customer profiles that can drive engagement and experiences in real time.	**Provide predictable experiences, manage digital identities, remove unnecessary friction** and help with privacy related processes (individual rights, consent and preference management) without compromising cyber risk.	**Ingest, compute and aggregate high volumes of structured and unstructured data** to share across your enterprise and offload from legacy EDWs.
Limitations	Not designed with marketers in mind. Data sets are too large and oftentimes not the most up-to-date for real-time personalization and marketing purposes.	Not designed with marketers in mind. Typically requires a common definition across the enterprise for each type of data, which precludes or makes it difficult to encompass customer interactions and behaviors.	Not designed to process high volumes of structured and unstructured data in real time. Core competency is not to hygiene data, nor to expose data bi-directionally with other marketing tools.	Not designed to manage personally identifiable information at the individual customer level; Not designed to expose data bi-directionally with other marketing tools. Will be significantly impacted by third-party cookie and MAID policy changes.	Not designed to onboard audience data for optimized media spend. Not designed to provide the same level of data governance and controls as a traditional MDM solution.	Not designed for marketing or digital enablement teams. Requires specialized cyber resources to deploy. Needs organizations to think holistically about how to govern and manage CIAM as it addresses cross-organizational needs not owned by one single business function.	Not designed to be application-specific; they are an extendable repository and toolset for any/all data. Requires data to be modeled in order to be used. Simply 'loading to the lake' will not solve every scenario or use case.
Focus	**Primary:** Structured enterprise data **Secondary:** Operational analytics and reports	**Primary:** Enterprise data **Secondary:** Customer domain data	**Primary:** Customer service **Secondary:** Sales	**Primary:** Media buying **Secondary:** Digital marketing	**Primary:** Digital marketing **Secondary:** Direct marketing	**Primary:** Identity & access management **Secondary:** Data & privacy	**Primary:** Raw data repository **Secondary:** Cost efficient, scalable storage
360° View of Customer	No native identity space. Can be a challenge to manage the volume of data at the speed required to utilize a single customer profile.	Can provide a common definition of a customer, but is not marketing-specific and typically does not store marketing activity data.	Unable to identify customers it is not familiar with; cannot create a unique customer ID.	Designed to target anonymous customers and does not provide a single view of the customer.	Can identify customers using data from various sources to create a single view of the customer.	Can establish linkage between people, devices and things across interactions, channels and touchpoints; data can be consumed by other systems.	Can be used as a data source for another system to construct a 360 Customer view but has no native identity space capability.

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Connecting the Customer Data Management ecosystem

In order to achieve effective, personalized decisioning or orchestration at scale, it is important to establish a unified and comprehensive data foundation that you control—no matter what other technology or human capabilities you apply. That foundation is what CDPs are designed to help provide.

But just as a foundation is not a complete house, a CDP is not the be-all and end-all solution for customer data. Today, the systems discussed above can continue to have value—as well as certain limitations—for marketing.

By leveraging the strengths of each system, you can connect consistent brand experiences for customers in ways that

deepen loyalty and drive long-term growth.

- **CDP:** Integrates data from CRM and DMP systems, business intelligence and identity resolution tools, and martech and adtech platforms to help provide a complete, accurate, real-time single view of the customer.
- **DMP:** Targets audiences through lookalike modeling, retargeting, and personalization by segmenting of anonymous individuals.
- **CRM:** Manages the sales and service interactions of known customers and prospects.
- **MDM:** Creates a common enterprise-wide definition for a customer for use across multiple functions within an organization.
- **EDW:** Stores and archives vast amounts of historical data about customers alongside structured business data.
- **CIAM:** Provides a simple and secure user experience, enables new channels, augments personalization, builds upon open standards, and provides a persistent view of digital identity.
- **Data Lake:** Stores, computes and archives vast amounts of raw data about customers.

When used in concert, these advances in digital technology are enabling marketers to achieve a single 360-degree view of the customer, and to deploy in real time a more effective end-to-end marketing process and customer experience.

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Getting the most value from customer data

Effectively engaging with customers is not just about marketing. It is about connecting each touchpoint—from first lead to lasting loyalty—through personalized, relevant experiences that engender trust. Doing this at enterprise scale is beyond the capabilities of a purely human organization. But today's technology, fed with the right data and deployed smartly, can dramatically expand the horizons of what's possible from your organization by helping you deliver more relevant, more human experiences across channels.

Deloitte's approach :

Leveraging various customer and audience data solutions in an overall ecosystem

Effectively engaging with customers is not just about marketing; it is about the entire human experience.

Deloitte can help take your consumer data next level, using it to infuse better decision-making that helps elevate the experiences of customers and prospects. By integrating anonymous audience data with known customer data from a variety of systems and engagement channels using a cloud-based approach, clients can gain increased transparency and real-time insights into who each consumer is, what his/her interests and needs are, and what types of customer experiences resonate most at an individual level.

By working in tight collaboration with our alliances across the marketing, CRM, eCommerce, data and social media ecosystem, Deloitte brings its strengths in CX strategy, system integration, machine learning-driven analytics, cloud-based solutions, and sector-specific knowledge to help clients operate and win on Customer Experience in an era where the customer is clearly in charge.

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Interested in learning more about Deloitte's proposition on Customer Data Management solutions?

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