Are you getting the value you expect from your MarTech investments?

celebrus

How to address the data modelling and orchestration headaches faced by marketing organizations.

Key takeaways

- Effective data orchestration drives value across the marketing tech stack. It integrates data from multiple channels and supplies actionable insights to enterprise decisioning systems.
- A robust data model is the foundation of data orchestration. Its quality determines the value derived from MarTech investments.
- Most CDP vendors leave creation of data models to their customers, forcing them to tie up expensive data science resources
- Your CDP should include an extensible data model, with a comprehensive behavioral data model out-of-the-box to deliver immediate insights.

The root cause

Organizations have lots of data – but without context a lot of it is meaningless. Trying to understand massive streams of data from websites, apps, or other customer interaction points is like trying to read a foreign language. Without a dictionary it's just garbled information with no meaning or value. A data model is the dictionary businesses need to sort data into a unified schema with understandable meaning. It defines what a customer ID should look like, how transactions are represented, and how individual actions are recorded. This core structure begins to arrange data into information that can be understood and used by other systems. The more detailed and comprehensive your dictionary, the deeper and higher quality your interpretation of that data can be.

However, knowing that someone clicked a button or submitted a form on your website isn't much help unless you can identify them and relate that action to what they've done before. This is the second purpose of the data model: to establish consistent ways in which data from different sources can be integrated, consolidated, and compared. As well as a dictionary, the data model defines the rules of grammar. It defines the relationships between different data and lays the foundations of how they can be used to create insights.

A data model is essential to understanding and using data. Unfortunately, most Customer Data Platforms (CDPs) don't come with data models. At best they offer very rudimentary ones that assemble basic data from a handful of channels using a few simple data tables. Enterprises needing anything more are forced to parcel-up batches of data and drop them on their data science teams to format and transform into something usable. Essentially, they have to create their own data model for each project.

Different point solutions provide different views of who the customer is and what they're doing. On top of that, data is prepared in different ways to suit different decisioning systems. Consequently, data silos evolve - each with their own data models that structure data to feed single target systems.

This causes bottlenecks that slow digital data.

Data scientists spend the bulk of their time on data preparation – building data models to make sense of the data before they can use it to create predictive analytics. It's commonly known in the data science community that 80% of time is spend on data preparation – finding, formatting and contextualizing data so it can be used to drive analytic models. This leaves only 20% of their valuable time spent actually using it. Data scientists resent the 'administrative' nature of this role – they'd much rather spend their time creating cool predictive models. And businesses, who are not only paying for expensive data scientists but expensive decisioning systems as well, want to get better data into the hands of data scientists so they can get their models into decisioning systems faster. Only then can they begin to see enhanced ROI from these investments.

An efficient data model integrates data from multiple collection points, creates high-performing data features, and exports quality signals to a wide range of production systems. It should:

Unify data from different channels into a consistent framework

The data model should automatically integrate data from multiple channels. Every data point from every interaction should be coded in a consistent and repeatable way, whether a customer interaction is on a mobile app, website, or from a bot or other digital touchpoint. Data should also be processed so that it's non-repetitive, clear, and unique - ensuring customers and their behaviors are captured without duplication or omissions.

Add context and create insight

A good data model will contain all the tables and attributes that could be expected to capture customer behavior. It should combine historic customer data with current behavior and data sets made up of hundreds of thousands of prior customer actions to help quickly spot those behaviors that are predictive of specific outcomes.

> Celebrus delivers a data model out of the box. Based on 22 years of detailed observation of real-world behaviors of over 300 million consumers, you can start searching for insights immediately.

Build and maintain identity graphs

Businesses often create multiple customer identities as individuals log onto various systems using different devices and multiple channels. A powerful data model will be able to stitch these together into a seamless, complete view of a single customer. It sounds simple but it is vital for hyper-personalization. Unfortunately, most data models serve individual silos and don't accommodate interactions with different customer IDs in different channels. They seldom provide a unified view of the customer across products, devices, and channels.

Create signals that other systems can use

At the end of the day, it doesn't matter how good your data model is if it can't supply high quality signals to other systems. Data is just data until it is acted upon. CDPs that offer rudimentary data models create them to serve only their own target systems. Being well connected and 'playing nicely' with all sorts of 3rd party systems is essential for the data model to act as the glue that drives value from all of them.

Manage all of the above in a fully compliant, transparent, and auditable manner

With increasing regulation on the use of customer data, businesses must not only ensure compliance but be able to demonstrate it. In regulated businesses

especially, but increasingly across all sectors, it's important to be able to show exactly how, and with what data, decisions were made. Businesses operating across multiple jurisdictions must be able to ensure that every customer's data is treated in line with the regulations relevant to them.

The Celebrus data model automatically adjusts for different governance and regulatory frameworks. Fully customizable and extendable to meet specific requirements it provides significant value out-of-the-box using 1st party data in a fully compliant manner, drastically reducing time to value.

Well connected

Data is only useful when it drives action. Insights become valuable when they feed into the decisioning systems and marketing applications that reach and influence customer behaviors. Streamlining and accelerating the flow of signals from analytical models to the systems that can act on them is crucial.

Even with integrated data from multiple customer touchpoints, businesses often end up re-processing data for numerous discrete point applications. Once again, data scientists spend time on data hygiene and administration just to wrangle data into the right formats for multiple systems. This creates a further set of bottlenecks that slow down processes, adding friction and cost to the effective use of data.

The business models of many marketing clouds are to keep data tightly aligned to a narrow set of applications. A modern CDP aspires to be the opposite – to be the system that everyone wants to receive data signals from. It acts as an intelligent 'pre-processor' of data and filters out digital noise to deliver clear signals to decisioning systems and other applications that demand high quality data inputs.

Your data model needs to collect and orchestrate data from multiple sources, add meaning and context based on a deep understanding of customer behavior in digital channels, and then pass high quality signals to the widest range of systems for activation.

What's real-time to you?

In order to meet the demands of modern consumers, enterprises need to collect, prepare, analyze, and pass data to decisioning systems instantly. Many data solutions claim to be 'real-time' systems, but the term can mean different things to different people.

If your goal is to send an email to a customer encouraging them to complete an online application, doing so within a couple of minutes is probably acceptable. If you want to send a push notification, such as a special in-app offer triggered by a location, then a few seconds is all you have. But if you want to interact 'in-the-moment' and offer hyper-personalized, dynamic content while a customer is on a webpage, then that needs to happen within milliseconds.

Using its data model to unify data from online browsing and offline analytics, Celebrus provides configurable real-time events in milliseconds to real-time interactive marketing at a retail bank. As a result, one bank has seen more than 50x increase in click-through rates, generating over $50 million in incremental revenue in the first year.

Many platforms refer to "real-time" meaning they provide information on activity that's happening within seconds. There's no context or intelligence added, just the raw data that somebody clicked a button. Without context about who that is, what they've done previously in the same session, or in other sessions in other channels and with other

devices it has very little value. Adding this context is what extends 'real-time' into seconds, minutes, and even hours before useful information can be delivered. And that's assuming the organization has a data model capable of stitching all these data points together in the first place.

With true real-time data capture, signals are processed instantly through the data model to provide deep customer understanding. This includes information that someone clicked a button, but also who it was, everything else they've done in that session, and all the other interactions they've had with the brand through digital channels over time.

Organizations spend millions on systems and processes to capture customer data. They also invest heavily in the activation layer with decisioning and customer interaction technology. But without the intelligence provided by well-constructed data orchestration to connect these systems, they struggle with incomplete and fragmented streams of data. Creation of point solutions at both ends of this chain add to the complexity, costs, and challenges of integrating data and deriving value from it. Without data orchestration, marketing technology often fails to drive value for the business.

About the Celebrus data model

The Celebrus data model collects and orchestrates data from multiple sources, adds meaning and context based on its deep understanding of customer behavior in digital channels, and then passes high quality signals onto the widest range of systems for activation.

Celebrus provides a complete, informed understanding that can feed decisions on the next best action or any other real-time analytics processes needed in about **40 milliseconds**.

The data model at the heart of Celebrus has been built on 22 years of understanding the behaviors of millions of known individuals and billions of sessions annually across all digital touchpoints. It's the world's most comprehensive behavioral data model with 180 data tables and thousands of attributes delivered out of the box.

Celebrus provides a simple to deploy, low-code, approach to capturing complete data on customer behavior in digital channels. It includes, for free, a comprehensive data model that unifies and organizes data to create features that have proven predictive qualities and utility. Finally, it connects to a wide range of marketing technologies seamlessly.

Celebrus takes care of data orchestration capturing consistent, granular data once, in any digital channel, creating intelligence and connecting to the systems that use it to deliver value. Existing investments are protected and enhanced with high quality signals and instant data that allows in-the-moment personalization and interaction. The most comprehensive out of the box data model reduced data wrangling and saves as much as 90% of data scientists' time in data preparation. As a result, costs are cut by between 60 and 70 per cent.

It seems like magic, but Celebrus' advantages are built on 20+ years of sharp focus on understanding customers' behaviors in digital channels.

Partners and integrations

Over the past decade, Celebrus has embedded deep integrations with leading decisioning systems. It has co-development and product planning relationships with Teradata, Pega Systems, and SAS and works closely with Adobe systems to ensure each party can optimize their data orchestration to benefit customers.

Celebrus also has native API-based integrations with more than 100 leading marketing technology products from analytics to email, advertising to social, as well as cloud, hybrid, and on-premises CRM, data storage, processing, and monitoring systems.

Celebrus optimizes data to existing target systems in the way these systems expect it. There's no need for them to conform to the way Celebrus works. This leads to saving of 60-70% of digital data management costs in the first year by removing the need for complex integrations and data formatting.

About Celebrus CDP

Celebrus CDP empowers businesses to understand their customers with true real-time, first-party data capture and identity tracking technology built to adhere to evolving, complex compliance standards. that reduce costs and fuel identity-based personalized experiences.

Find out more about how Celebrus helps you to activate your customer data and see which incredible companies in your industry are already using Celebrus to understand their customers.