

WHITEPAPER

# Designed for a Rapidly Changing World

**How Amperity leverages an agile approach to customer data management, ensuring a flexible and future-proof customer data stack**

Companies today live in a world of rapid change. Consumer expectations and behaviors are constantly evolving, creating new types of data and giving rise to new tools, business opportunities, and sources of competition. Adding to the complexity, public sentiment, standard practices, and government policy surrounding consumer data are in flux as the world attempts to catch up with technological innovation.

And let's face it – the rate of change is only accelerating, requiring companies to be even more responsive in order to meet consumer demand, empower their workforce, and comply with evolving regulations. Traditional approaches to unifying customer data are not built to handle change – they require months to deploy, use lossy connectors to bring data together, and impose a fixed schema and limited APIs. This means that, rather than naturally flexing with change, they require constant work (and rework) just to stay up and running, and end up behind the curve with suboptimal results. This leads to frustration across the organization despite increased investment. Marketers and data analysts are forced to work with low quality data, and, in turn, IT professionals constantly struggle to keep up with the growing demands.

To deal with the volume and velocity of shifting data, expectations, and requirements, you need a customer data platform that's designed - from the ground up - to deliver results quickly, scale as you grow, and rapidly adapt together with your customers.

## Amperity: Built for Flexibility from the Ground Up

Amperity was built, from day one, to embrace change. After years of struggling to unify data using traditional approaches, we designed a system that we believed would revolutionize customer data management. We sought not only to accelerate and maximize customer data usage in the short term, but for the long term as well. This meant the platform needed to be agile, so when the inevitable occurred - growth, change, and innovation - we could flex along with it.

After 12 months of research and invention, we launched Amperity, the world's first Intelligent Customer Data Platform. Amperity offers an entirely new approach to customer data management, beginning with raw ingestion of all your data from any source, and ending with customized, flexible customer profiles using multiple databases and tables, and tool-specific segments.

## **RAW INGESTION OF DATA**

In traditional connector-based systems, the data is transformed and mapped to a fixed schema when it is loaded into the system. If the mapping of fields is incorrect, or there is a need to get additional data from the source system, you have to update the connector and reload the data. Because we ingest all your data raw, we never need to go back to get more from the same source, which allows us to set up the connection once and adapt or update in an iterative way. We can start with the granular customer information that can be used to link records together and generate your customer 360, and then incorporate more attributes as we learn more from the data. This loosely-coupled approach makes it easy to bring on new data sources, start with a few attributes, and then gradually take on more complexity.

## **DATA QUALITY THAT INCREASES OVER TIME**

Traditional customer data integration systems have only one chance to get it right - on initial ingestion. Commonly, this is where data is merged with other matched data. Unfortunately, there are frequently mistakes that are made during the initial matching process - where some data gets matched incorrectly (a false positive) and other data is not matched at all (a false negative). These systems don't have the ability to reformulate data from the original raw data and often lack the ability to compare data from multiple different sources to get accurate results. Amperity's approach is different. Instead of merging data on ingestion and storing the result, we keep the merge rules and the match clusterings entirely separate. Then, as data changes over time, we can recompute the entire affected portion of the customer database. We also maintain stable identifiers so that this natural evolution doesn't complicate downstream usage of the data. Ultimately, this means that the quality of data over time is always maximized, because the system is designed for change.

## **UNIQUE CUSTOMER PROFILE**

Unlike other systems which start with a fixed notion of a customer profile, we create a completely customized profile based on the unique attributes of our customers and your data. This means not only do we find and promote specific attributes that are unique to your business, but we also customize the confidence thresholds for matching identities and change them as we learn more from your specific data. This allows us to add or remove attributes as you add data sources and improve how we resolve identities as you bring in new types of data – all without changing the underlying data sources and connections, and without taking months to deploy.

## **MULTIPLE DATABASES AND TABLES**

A fundamental design point of the Amperity system is that there is no single view of the customer that is durable throughout the lifecycle of a company. That's why our system is designed to produce multiple databases and tables, each representing a unique, tailored view of your customer data for your use cases. In our initial engagement, we start with a single database which serves as the basis for the customer 360 table and the first use cases. Over time, however, we recognize that you'll want to bring on new data sources, new teams, or require fundamentally new views of the data; and at the same time, you will want to preserve your existing view of the customer. With our system, it is easy to keep generating your original database and associated tables, and, in parallel, add tables or create a second or third database that includes new fields or a new way to organize your data – allowing for easy versioning and management of customer views as your customer evolves, and allowing gradual migration of systems over time.

## **SEGMENTS THAT ADAPT TO EMERGING TOOLS**

It seems like every day there's a new tool invented that's designed to meet a specific need in the market. And while each tool has its own way of operating, they all come to life when powered by clean and complete data. While some customer data systems require a specific connector to be built for every tool you want to support, our system is designed to make it easy for you to generate a segment of data tailored to and formatted for the tool you are targeting – even if that tool doesn't exist yet. We do this by generating the data that tool needs in the format it supports – whether that be a file, table, or database. We then make it easy to get that data to the tool, either by pushing it directly or hosting it for you. This allows for a new tool to be onboarded in a matter of days or weeks, not months. It also means you have complete control over what and how much data that new tool gets, allowing you to protect one of your greatest assets – your customer data.

## **SCALE, SECURITY, AND COMPLIANCE**

Finally, Amperity is built natively on the commercial cloud infrastructure provided by AWS or Azure, so our system can scale to meet your data demands as they grow while delivering the security and compliance you expect. On top of this foundation, we've built a system that provides you with world class security. Your data is always your data, and we securely transport, store, process, and distribute it, giving you granular control over access and sensitive customer information. We can dynamically scale to meet your growing demands, adding capacity to ingest and process the growing variety of data you need to run your business. And as these companies expand their cloud capabilities, we directly benefit and pass those benefits on to you.

# How This Works in Practice

In today's world, change is not a transition or a stage – it represents the new status quo. For companies who are built to adapt, it creates new opportunities to do more for customers and differentiate from competitors; for others, it obsoletes systems before they're implemented and leaves them feeling constantly behind. We built Amperity to embrace change and provide the flexibility you need to compete in an evolving world. Even in our first few months, we've seen how this flexibility has benefited our early customers.

While most systems take months to deploy, Amperity is up and running in the first 90 days – ingesting real data, finding hidden connections between customers, creating a unique customer profile tailored to your company, and creating your first segments. We follow with rapid iterations that add more data sources and bring on more use cases, with the flexibility to adapt as we learn more together. This means, in a few short months, our customers have achieved remarkable results before previous systems could even get up and running.

Our Customer Success teams operate using rapid iterations, allowing us to deliver new value incrementally and adapt our engagement as you discover new use cases and your needs change. In one example, we worked with a major resort property to implement their customer data platform, starting with hotel data. It became clear that we could unlock even more insights by bringing together data from dining and events. We were able to change our iteration plan and create a customer 360 profile that reflected the full breadth of their customer engagements, including event data, and enable effective cross-selling and engagement across the entire property.

Acquisitions or mergers create problems for customer data platforms because these traditional systems require a common schema from the start, and do not support multiple views of customer data. In the case of most mergers, both companies use the different tools and different formats, making it a nightmare to try to combine their data.

With Amperity, our ability to support multiple views of customer data allows operations to move smoothly, meaning you can continue to use the system to operate your current business while building a shared view of all the data to support the combined businesses and facilitate a smooth transition for your customers. We worked with a major airline to unlock insights from their customer data and a short time after we started,

they merged with another airline. Because of the our system design, our customer was quickly able to ingest data from both airlines and get a merged view of all their customers between both airlines across all systems. And they did this without requiring any rework or change of their existing implementation, and while continuing to deliver the data that served their business.

We built Amperity recognizing that a modern customer data platform needs to provide more than just a point-in-time solution – it must embrace change and provide a foundation upon which companies can learn, grow, and evolve. Customer data platforms represent a critical piece of your infrastructure. Make sure you pick one that is designed to help you compete in a rapidly changing world.

## About Amperity

Amperity, the world's first Intelligent Customer Data platform, is revolutionizing customer data unification and management for enterprise brands. Leveraging advanced machine learning-powered identity resolution and the full power of the cloud, Amperity ingests raw data, stitches it together, and forms the richest customer profiles possible. Then, by shaping multiple databases for any downstream system, Amperity syndicates data to the full set of engagement and analytics tools in the precise formats they require. With Amperity, many of the world's most loved brands are unlocking their siloed data, powering their tools with rich customer information, and bringing their best, data-driven marketing ideas to life.