



WHITE PAPER

# The 11 Core Functionalities of a Successful Data Strategy

How to approach building a flexible data foundation powering a world-class customer experience



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marketing suite users say it's  
the only tool they use*

*Walker Sands  
State of Technology 2017 Report*

## Executive summary

As customers use more channels to interact with brands and organizations increase the number of technology solutions, data is more fragmented than ever. According to the Walker Sands State of Technology 2017 report, only 16 percent of marketing suite users say it's the only tool they use, alluding to the prevalence of disconnected marketing stacks. This has led to increased operational lag, inefficient teams, poor customer experiences, and privacy and legal risks. To combat this, businesses need integrated systems to manage their data and interactions with customers across touch points.

The most effective and efficient solution to these problems is a Universal Data Hub (UDH) which empowers cross-organizational collection, access and activation of the company's most powerful, comprehensive data set. But what are the core characteristics and functionalities that marketers and business leaders need to consider when building a foundational data strategy?

Strategists should build their plan around four key tenets; 1st party data as the primary consideration, data flexibility, vendor neutrality and real time data access.

**When putting these tenets to action, it is essential that the following functionalities are included in your Universal Data Hub:**

1. Data collection
2. Segmentation
3. Support for Event- and Audience-level Data
4. Data Distribution
5. Profiling
6. Directives & Automation
7. Cross-Channel, Cross-Device Capability
8. Real Time
9. Programmatic Delivery
10. Client- and Server-side Integrations
11. Ease of Use

This paper provides a roadmap for implementing a universal approach to data that lays the foundation to provide a world-class customer experience today, while maintaining the flexibility to adapt to new technologies and behaviors in the future.

## Four Key Tenets

The UDH follows **four tenets** to ensure the right organizational focus and core **functionality**, which covers a collective toolset in managing data across the ecosystem.

### The Tenets of the UDH

#### 1. 1<sup>st</sup> Party First

The brand has a responsibility to manage its customers' data. As such, this platform focuses on 1st party data first.

#### 2. Data Flexible

The UDH handles all types of customer data – from digital to offline and from events (clicks and impressions) to user information. It also uses multiple data models and sources, enabling streaming, storage, and enrichment of this data.

#### 3. Vendor Neutral

To act as a foundation for the digital ecosystem, the UDH focuses solely on data management. It's nearly impossible to act as a data hub if you provide services that compete with the ones you are attempting to integrate. Be mindful of add-ons to marketing suites because they typically weren't built together from the ground up. They have often been cobbled together through acquisitions, they are not integrated with the rest of the cloud, and they still function separately.

#### 4. Real Time

It's easier to slow down than to speed up when it comes to technology. Your data needs to be available in real time and on demand to any vendor in your ecosystem. Even if real time isn't a part of your data strategy today, your systems should be "future proof," ready for when it is. As users demand more cross-device experiences, speed of data availability will be critical.

*Develop a central source of “truth” for those business-driving KPIs, a “Data Layer,” and ensure its neutrality to not only campaign vendors, but even the UDH*

## Core Functionalities

### Data Collection

Develop a taxonomy around your data, built by your business and defined in your business's terms. In every company, there are 5 to 10 core KPIs that drive the business. As a team, outline those KPIs, and ensure that everyone in the organization has access to the core metrics. Develop a central source of “truth” for those business-driving KPIs, a “**Data Layer**,” and ensure its neutrality to not only campaign vendors, but even the UDH. Strategy is key, so find a team that can help. The UDH does enable event- and user-level data collection and management and has open data models and multiple end points for collection. (ex: APIs, pixels, tags, and batch files)

### Segmentation

Today, the majority of data platforms lack robust segmentation capability. As data is collected, it is sent to different applications and channel technologies without creating centralized user profiles or segments. Such systems act as simple API hubs. Segmentation is an important capability, allowing users to define and subdivide a large audience into clearly identifiable segments with similar needs, wants, characteristics, etc., based on data. Users can then use these segments to provide relevant, end-to-end customer experiences. For example, segmentation empowers you to assign your VIPs or high-value customers to a certain campaign while pointing your discount shoppers to a different one. The UDH is a powerful segmentation and action engine, combining audience management and data enrichment and resulting in unified customer profiles and the ability to take immediate, relevant action.

### Support for Event- and Audience-Level Data

The ability to send event- and audience-level data within the same calls is key to personalized marketing throughout a customer's journey. For example, when an online transaction occurs, you may want to send the transaction data, along with the customer's persona, to your email service provider in order to follow up in a pertinent manner. The UDH's patented approach empowers users to collect their event-level data, enrich it into audiences, and trigger marketing tools to take action on that data – in real time, versus hours or even days.

### Data Distribution

In essence, the UDH is flexible and ample middleware powered by an expansive ecosystem of turnkey integrations. It is also a robust solution that enables the distribution of data through any means, from JavaScript “Tags” to APIs (SOAP/REST) to file transfer to database storage and access. As Webhooks become more and more popular, the UDH provides continued expertise and flexibility in this area. Most vendors are moving away from batch and cookies, so having the UDH's powerful programmatic data distribution is key. Finally, a user should be able to configure and send data. The UDH enables teams throughout the business, so IT and development involvement aren't necessarily a required step.

### Profiling

Data from marketing efforts is fundamentally event-based. Pageviews, app loads, display impressions are all, in the end, simple events. So it is important that the UDH collects and distributes this basic event data while also providing solutions for the aggregation of it into user profiles. This furthers the segmentation and enrichment of those profiles to real-time, state-full datasets. The UDH has proprietary cross-device identification solutions, also critical for true user profiles.

*A strength of the UDH, but often a shortcoming of most API hubs, is the ability to transfer data in a programmatic manner*

### **Directives and Automation**

This is really where a UDH brings it all together. Now that the data is collected, profiled and connected to thousands of vendors, the UDH enables smart directives across vendors, channels, and experiences. With unified data, you can achieve unified messaging, and the UDH supports the coordination of that delivery with automation and business logic.

### **Cross-Channel, Cross-Device Capability**

The multi-channel, multi-device consumer is no longer a myth. And the UDH satisfies a key requirement with the ability to stitch together data from multiple sources and devices. Without it, the user experience is broken at best. There are two ways to stitch together such data. One is to focus on experiences moving forward: Once a common identifier is available, all data will be connected. But the UDH uses a more complete approach by stitching together both the past and present data, providing a comprehensive view of the consumer.

### **Real Time**

What are the capabilities of the system? Can it ingest data in real time? Can it process data in real-time? And can it send data in real-time? Some data platforms may have the capability in one area, but not all three. The UDH, however, is proficient in each and markets to customers “in the moment.”

### **Programmatic Delivery**

A strength of the UDH, but often a shortcoming of most API hubs, is the ability to transfer data in a programmatic manner. The UDH offers programmatic delivery, empowering users to create rules that trigger the transfer of data. For example, a rule may be to look for known website visitors who went to a white-paper page but did not download the document. Upon the end of session, a trigger is sent to the email service provider to remind the visitor to download the paper. If the visitor does not respond to the email within 24 hours, another trigger is sent to the CRM so that the sales rep can follow up with a call. This programmatic capability lets organizations build automation processes across business operations.

### **Client- and Server-side Integrations**

Not all communications are going to be made using API calls (server-side). In fact, most MarTech vendors use tags – a client-side protocol – to collect information. If the end goal is for marketing to also leverage the UDH, it must support both sides. This opens it up for the most vendors and allows all teams to leverage the same data platform, creating a more streamlined business operation.

### **Ease of Use**

The UDH is user-friendly and has been developed with the technical and non-technical user in mind. This optimized user experience ensures the solution can, and will, be widely adopted by different teams (IT, marketing, customer care, etc.).

## Vendor Neutrality

It is imperative that the UDH takes a vendor-agnostic approach and supports all MarTech vendors in the ecosystem. This allows users to choose the best solutions for their business needs. And since the MarTech landscape is changing so rapidly, the UDH's ability to fully integrate your data with current and future vendors gives you unprecedented flexibility with your technology.

The Universal Data Hub also complements other enterprise initiatives, such as marketing clouds, data warehouses, and point solutions. The following are examples of how the UDH works with and enhances such solutions.

### **How the UDH Works with Marketing Clouds**

Today's marketing clouds are a collection of point solutions, acquired and integrated at various times. As mentioned earlier, these solutions typically do not share the same data infrastructure. The UDH can feed any data to any of the point solutions within the marketing cloud, so the applications will have a deeper integration, providing a more unified customer experience. It is also important to note that no cloud offers the full spectrum of applications used by marketing. The UDH lets marketing teams add any other point solution to their stacks and have them work in tandem.

### **How the UDH Works with Big Data**

The UDH does not replace traditional business-intelligence or data-warehouse initiatives. Rather, it complements them by acting as a hub for systems and enterprise/marketing applications. One of the many challenges organizations face is not being able to act on data or insights in their own data warehouses. A UDH is primarily built to take action on data by exposing it to various marketing and customer touch points. This helps companies monetize their investments in data warehouses.

### **How the UDH Works with Point Solutions**

Most companies use a combination of point solutions to build their marketing or enterprise stacks. Because these solutions do not have built-in integrations, the onus is on the development team, adding time, resources, and tremendous costs. The UDH removes this challenge by allowing the company to centralize its data once and make it available to all point solutions. Every application will work as if it's part of a well-orchestrated business cloud. For such systems, the UDH effectively acts as an orchestration engine.

## Summary

The Universal Data Hub is a relatively new piece of the MarTech stack, but one that represents the foundation. It empowers organizations, centralizing their data and connecting it to applications throughout the enterprise. And it provides applications and teams with standardized data, orchestrating a unified customer experience. As business leaders, marketers, and technologists, we should embrace these new technologies for the critical role they play in solving long standing problems. We need an agile solution to get to market faster, build great experiences as cohesive teams, maintain trust, and govern the data we use. The Universal Data Hub is that solution.

The Tealium Universal Data Hub enables clients to build a 360-degree view of their customers across all digital and physical channels and engage with those customers in real time. With the industry-leading integration marketplace, including over 1,000 MarTech vendors, Tealium provides a vendor-neutral data layer underlying all customer-experience applications. This gives clients a best-of-breed mix of solutions, catered to their business type, and supports their strategic initiatives.

To find out more about the Tealium Universal Data Hub, please visit [www.tealium.com](https://www.tealium.com) and request a demo.



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