Big Data is a Big Deal to eCommerce Businesses: Analytic Insight with Teradata and the Cloud

Exploding onto the scene about a decade ago, group-buying service companies have become a force in the eCommerce space. Enticing consumers with exclusive deals and discounts on goods and services—from cell phone cases to all-inclusive resort vacations—these time-sensitive deal websites have made their mark on their industry. For one such company, the secret to their success is data. Real-time location sharing gives an opportunity to display geographically relevant deals; historic transactional data allows past purchases to dictate what offers show up in emails; and consumer behaviors are tracked, noting which offers are browsed and purchased. The data collected and analyzed helps their engineers to build the ultimate experience for their consumer—and all of it depends on timing, technology, and delivering the right offer to the right consumer to drive business.

By using data to provide the user with a personalized experience, this particular eCommerce giant is able to create a higher likelihood of conversion. Each of these unique user interactions are built by taking several data points to offer the best, most relevant products and services to each user. This model has been so successful that they have grown their presence beyond the U.S. to over 40 different countries. In order to stay at the top of the eCommerce industry, however, they looked to Teradata to dig deeper into data analytics to maintain their stronghold.

Data Drives Business

Giving consumers a great experience is not simply about creating positive brand sentiment—though, that is a positive byproduct. This interaction is built with purpose.

Captured big data is used to create a series of predictive models which create meaningful analytics reporting, eventually leading to improved individual consumer interactions and an enhanced experience. Essentially, these algorithms power the system by providing analytics to business leaders so that they can make informed decisions—all based on data.

Utilizing a top-of-the-line technology stack, including the Teradata Data Warehouse, MicroStrategy, and Hadoop, deployed on-premises, in the public cloud, or as a service on Teradata IntelliCloud™, *data across all sources—marketing emails, internal web logs, mobile logs, and tables—can be integrated so that data scientists and marketing analysts are able to create and aggregate reporting solutions into the consumer journey.* This path to conversion helps to identify individual users' buying experiences, even when a user session spans the mobile application and a web browser. This creates a personalized and unique experience that flows through the entire consumer path to conversion seamlessly, to not only log the data of who purchased and what was bought, but to gain an understanding of the behavior behind the purchase.

This ability to track individual browsing experiences is made possible by leveraging functional analytics and is essential for answering critical business questions:

- When a product or service was purchased, what else was available?

- Did the number of items available affect the consumer's desire to buy?

- If there are more deals, is it more or less engaging for the consumer?
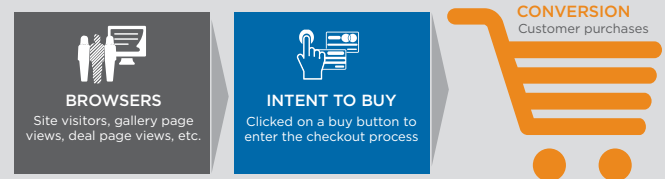
The Consumer Experience Journey

Figure 1: This consumer's journey breaks down the demand-side of the business, which can be divided into three parts.

Each specific component within the consumer experience journey (Figure 1) plays a critical role in their experience, giving Brand Marketing and Consumer Goods eCommerce leaders insights to cater future interactions.

Browsers

By monitoring web browser activity and web logs, analysts can begin to identify the peak times for browsing and the sources of traffic. Additionally, it is helpful to discover more about the habits of those consumers browsing, including how many deals are seen and if the user was only visiting the site for a specific offer. All of this is dependent on the individual consumer's attributes:

- When and where did this session start?

- Is this a new consumer or someone who visits regularly?

- How does that correlate with the offer that the consumer sees?

All of this information together yields the browsing experience. Analysts can learn from this information to discover whether the site is engaging and creates conversions or if it is becoming more of a transactional site, where they are only visiting for a specific offer. If the latter is the case, which is not ideal, the consumer experience will need to be adjusted to accommodate longer browsing sessions and higher relevance.

Intent to Buy

This component on the path to conversion highlights the point in which consumers are now ready to purchase. However, analysts still see opportunity to refine this process. For example, is it better to give multiple options within a deal or give only one option? Is offering goods in a specific color going to pique interest or decrease interest?

The objective is to determine whether these options deter or enhance a consumer's likelihood of buying. This type of analysis is done on the back end to improve the consumer's experience and increase the chance of conversion. By understanding how different demand channels affect consumer behavior, analysts are able to better predict variables in the consumer's intent to buy.

Conversion

This stage of the consumer experience journey joins together transaction systems to correlate all data points logged in the previous sections of the path to conversion. It is at this point that analysts are able to recognize typical behaviors by users and identify issues in the journey to conversion, as well as review the amount of goods or services sold by traffic source or platform, helping to determine which deals and sources convert best. For instance, because a certain conversion percentage is expected in each offer, not meeting this threshold would indicate that something within the consumer path to conversion may be broken.

The data collected in this stage is aggregated and pulled together so that brand marketing can improve the buying process and consumer experience, recognize issues more quickly, and help justify marketing support or increased budget in specific business areas—all to improve the likelihood of conversion.

Together, all three components of the consumer experience journey help answer specific questions about the buying process and about the individual consumer. This gives decision makers the ability to better cater to each unique individual, ultimately leading to better rates of conversion and greater sales. These insights have better prepared this eCommerce company for the future and offer business solutions that can grow along with their business—no matter what deals lie ahead.

About Teradata

With nearly 10,000 employees worldwide, Teradata is a world-class company with one focus—to unleash the potential of great companies. Our end game and yours is to achieve high-impact business outcomes through analytics. As trusted advisors for analytics, we will continue to give our customers the most agile solutions to solve the most critical business problems and achieve powerful business outcomes. Ready to leverage data and analytics to redefine what is possible? Teradata is ready to help drive your business forward. To learn more about Teradata and optimizing the consumer experience, visit Teradata.com/Insights/Customer-Experience. When you know more, you can do more.