

Making customer next best offers count

Deloitte and Cloudera can help you sort through Big Data to make the right offers to the right customers at the right time

In the field of digital marketing, sophisticated analytics tools have become essential to the process of generating customized offers targeting specific customers or groups of customers. These targeted offers, often called “customer next best offers” are based on insights gathered by analyzing data from many sources and are intended to create higher success rates compared to uniform offers. The truth is however, that many targeted offers still fall flat, with conversion rates commonly as low as one to two percent.

Achieving a higher rate of success with targeted offers requires deep insight, which in turn requires both the right business processes and the right technology to sort through the extensive possibilities that are buried deep in your data. That’s where Deloitte can help.

A Big Data architecture

The explosion of data created by social media, machines, intelligent devices, Weblogs, and other applications, is creating new challenges and new opportunities for marketers. Data such as customer demographics, purchasing behavior patterns, and clickstreams are being increasingly combined with real time attributes such

as customer location, local weather patterns, and store inventory. The result is that today’s datasets are much too large to be effectively manipulated and examined using traditional analytics tools and relational database technology.

Real-time analysis of large datasets requires a new approach to the technology architecture and new business processes for extracting the value from your data.

Deloitte has developed the Customer Next Best Offer Accelerator to bring you the right technology and the right business processes that you need to increase the effectiveness of your customer next best offers. The accelerator combines Deloitte’s deep experience in digital marketing and analytics with Cloudera Enterprise, a leading technology platform for Big Data.

Figure 1 highlights the system architecture and the technology components that comprise it. The architecture is highly scalable due to the distributed file system in Cloudera Enterprise (based on Apache Hadoop™). As your dataset grows, the system can be expanded by simply adding more commodity servers to your Hadoop cluster for expanded compute and storage capacity.

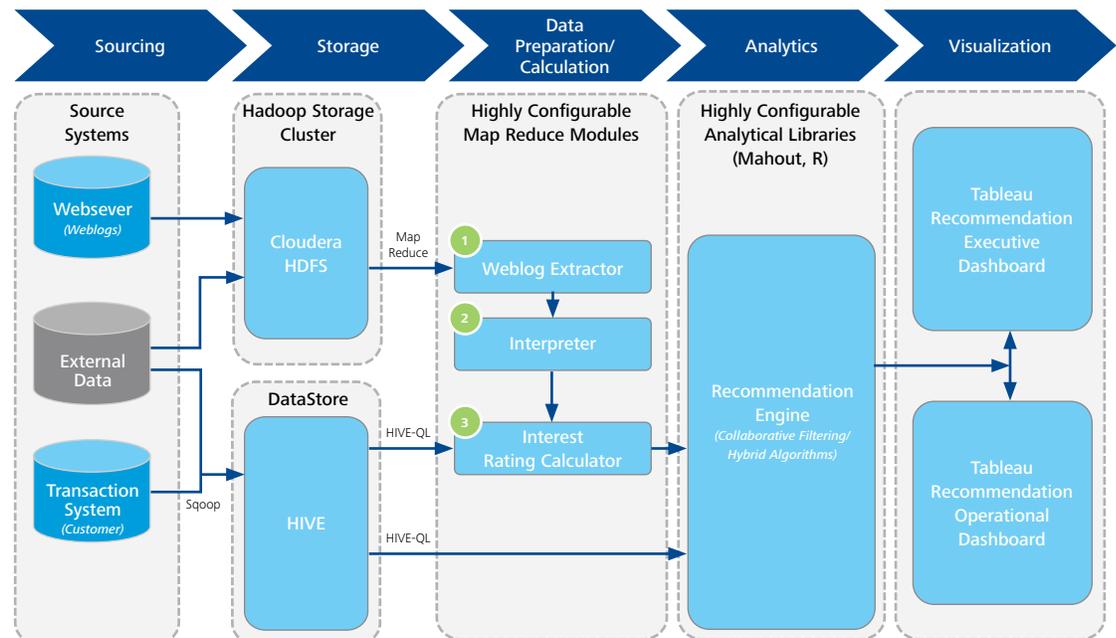


Figure 1: System Architecture for the Deloitte Customer Next Best Offer Accelerator

As shown in Figure 1, the architecture enables input from many different sources and supports storage of both structured and unstructured data in the distributed file system and datastore. Data is prepared for analytics through a three-step process that includes extraction, interpretation, and assignment of a customer interest rating. The customer's interest in a given product is calculated based on the frequency of visits to the product page as well as the duration of time spent on the page.

Actionable insights in real-time can turn consumer interest into purchases

Real-time analytics map the user journey and generates actionable insights that can allow you to respond quickly with a customer next offer and convert interested prospects into purchasing customers.

Our Customer Next Best Offer Accelerator maps consumer profiles to specific customer segments. We then use pattern analysis to gain insights about customer behaviors and apply a sophisticated algorithm to select the most appropriate customer next offer. In addition to considering the customer interest rating for various products, our recommendation engine also considers the actions of other users in that segment when faced with a similar situation. The resulting recommendations are based on offers that have worked well in similar situations and for which a high degree of customer interest has been shown.

Because data is filtered in real-time, the recommendation dashboard (Figure 2) can be updated in real-time. The dashboard is generated using visualization technology from an industry leading data visualization platform. The platform's actionable results are published in a format that is easy to comprehend.



Figure 2: Customer Next Best Offer Dashboard

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

This publication contains general information only and is based on the experiences and research of Deloitte practitioners. Deloitte is not, by means of this publication, rendering business, financial, investment, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte, its affiliates, and related entities shall not be responsible for any loss sustained by any person who relies on this publication.

About the Deloitte Analytics practice

Deloitte has been widely recognized as a leader in business analytics (See Deloitte at a Glance sidebar). Our Analytics practice uses a fully integrated approach to analytics that can unlock the value buried deep in your data. We combine the science of business analytics with strategy-level insights and an understanding of how to bring analytics to the front lines of your organization.

Our experienced industry specialists can help you identify which questions matter and where to find the answers. Our services address an overall Information Management strategy as well as seamless integration across the domains of technology, processes, and people. We bring an extensive set of capabilities that involve reporting applications, portals, information delivery, and basic as well as advanced analytics — all grounded in a deep understanding of the business issues that drive the industries and sectors we serve.

Learn more

To learn more about how Deloitte and Cloudera can help you increase conversions and drive revenue through our Customer Next Best Offer Accelerator, please contact a Deloitte team member listed below.

Ashish Verma

Director, Big Data Lead, Information Management
Deloitte Consulting LLP
asverma@deloitte.com
+1 703 251 3952

Deepak Konale

Senior Manager, Big Data Solutions Lead,
Information Management
Deloitte Consulting LLP
Dkonale@deloitte.com
+1 484 612 2321

Deloitte at a Glance

- Deloitte is one of the largest privately held professional services organization in the world based on headcount and breadth of capability, delivering audit, enterprise risk, tax, finance, strategy and operations, human capital, and technology services.
- Deloitte named a global leader in Business Analytics Services based on capabilities by Gartner.¹
- Deloitte named a global leader in Business Analytics Consulting and Systems Integration Services by IDC.²
- Deloitte named the global leader in Analytics IT Consulting based on capabilities by Kennedy.³
- Deloitte is the largest Consulting organization in the world.^{4,5}
- Deloitte is the largest IT consulting organization in the world.⁵
- Deloitte is a global leader in Technology Transformation.
- Deloitte is a global leader in Information Security consulting.
- Deloitte is a global leader in IT Strategy Consulting.
- Deloitte is on *Fortune* magazine's list of "100 Best Companies to Work For" for the 14th year (Deloitte LLP and its subsidiaries).

¹ Gartner Magic Quadrant for Business Analytics Services, Worldwide, Alex Soejarto, Neil Chandler, 17 July, 2014.

² IDC MarketScape: Worldwide Business Analytics Consulting and Systems Integration Services 2014 Vendor Assessment by Ali Zaidi, May 2014, IDC #246675.

³ Kennedy Consulting Research & Advisory; IT Consulting: Analytics 2014; Kennedy Consulting Research & Advisory estimates © 2014 Kennedy Information, LLC. Reproduced under license.

⁴ Includes S&O, HR, IT, Risk, FA, Audit, and Tax advisory capabilities; excludes regulatory audit and tax compliance.

⁵ DITL Global AR, February 2013; DITL Strategy, June 2012.