



# EXPLORING NEW FRONTIERS IN REAL-TIME CRM: PROGRAMMATIC, PEOPLE-BASED AND INCREMENTALITY



Reduction in customer acquisition costs

#### Industry

\_ Business Services, Adtech & Martech

#### Location

- Headquarters: Paris, France

"Cloudera is what empowers all the machine learning algorithms and skill sets that we have inhouse."

Alexys Jacob, Chief Technology Officer, Numberly Numberly is an international data-marketing technology company generating true incremental value both for consumers and its clients.

## Challenge

As the world at large has become more data driven, marketing technology companies like Numberly increasingly rely on their ability to deliver the best insights from diverse, voluminous datasets to gain a competitive advantage. Generating the greatest return on marketing and advertising spend hinges on their ability to deliver precisely targeted, relevant and timely messages.

To maintain its foothold as a global leader, Numberly must include, process and reconcile large and diverse datasets—such as static data from CRMs and streaming sensor data—and make that data accessible for data science and analytics in close to real time.

## Solution

The data collection, machine learning and activation ecosystem on Cloudera is fueling realtime marketing analytics, ad bidding and recommendation engines at scale and is a core asset of Numberly.

"Cloudera is what empowers all the machine learning algorithms and skill sets that we have in-house," said Alexys Jacob, CTO of Numberly.

Numberly especially appreciates the Cloudera tool that supports critical security and governance needs.

"We work with many different types of sectors such as retailers, banks and insurance providers, all of which are very concerned about security," said Jacob. "That's why we've always been very focused on the security of the data that we operate."





#### Solution highlights

- Modern Data Platform: Cloudera Enterprise
- Workloads: Data Engineering
- Key Components: Apache Spark™,
  Cloudera Navigator

## Applications supported

- Programmatic display buy optimization through real-time algorithms
- Personalization and recommendation engines
- Data collection and activation strategies optimization
- Personalization and relevance of programmatic communication optimization

#### Data sources

- CRM PII data
- Location-based data feeds such as social media
- Non-PII data such as media campaign tracking
- Sensors such as RFIDs and iBeacons

#### Impact

- \_ Incremental sales for clients
- Increased ad click rates
- Better traffic flow in stadiums and retail stores
- More effective in-store product placement

### Big data scale

\_ 2PB+

## **Implementation**

Numberly needed a modern data platform that would empower machine learning. Cloudera allows the company to focus on innovation without worrying about integrating and supporting every detail of a complex technology stack.

Numberly values Cloudera Enterprise for:

- \_ Intuitive, direct access to worldwide platform experts
- Visibility into ecosystem tooling
- Data governance, privacy and lineage (via Cloudera Navigator)
- \_ Access to the Cloudera Data Science Workbench

"We wanted to raise the maturity and quality bars of our platform, which is why we partnered with Cloudera," said Jacob. "We have a clear vision of the whole ecosystem and the tools we're using. Configuration analyses, reporting and monitoring help us understand the exact activity in the cluster, how we can scale it and when. These are important matters for a fast-growing business."

## Results

Numberly's clients directly benefit from the additional quality that Cloudera brings to its machine learning platform. For example:

- \_ A large international entertainment company benefitted with a 35 percent increase in advertising click rates resulting from an algorithm built on top of Cloudera that enabled Numberly to optimize programmatic display ad buying strategies on various user signals, including navigation analytics, data crawling and text mining.
- \_Stade de France better understands and optimizes attendee traffic flow during events by analyzing traces of Wi-Fi connections, RFIDs and sensor data, in addition to offline data.
- \_ A global bank/insurance company trusted Numberly skills and data technology to leverage their behavioral data in order to reduce their new customers acquisition costs. Thanks to an innovative machine learning algorithm, costs were reduced by 20 percent.