Carrefour | Success story

Implementation of a Data-Centric model through a Big Data Platform

PUE — Make your data shine

About Carrefour

Carrefour, a global leader in retail distribution, stands as the strongest Carrefour subsidiary worldwide in terms of presence, number of hypermarkets, and brand social recognition. Beyond its stores, Carrefour also offers financial services, gas stations, and travel agencies.

Carrefour has committed to a Data-Centric model through a Big Data platform with Cloudera.

PUE has contributed by managing and implementing extreme monitoring of Cloudera platforms in line with Carrefour's policies.

The challenge

In recent years, Carrefour has focused on a digital transformation strategy where omnichannel and customer service are the main focus. This involves adopting technology to meet these needs.

Previously, systems were not aligned, and there was no entity providing 100% customer consolidation and vision. They had independent systems without logical integration between them, resulting in different teams doing the same tasks.

The challenge, therefore, was to find solutions that offer stability, scalability, high availability, fault tolerance, and integration with the rest of Carrefour's existing ecosystems.
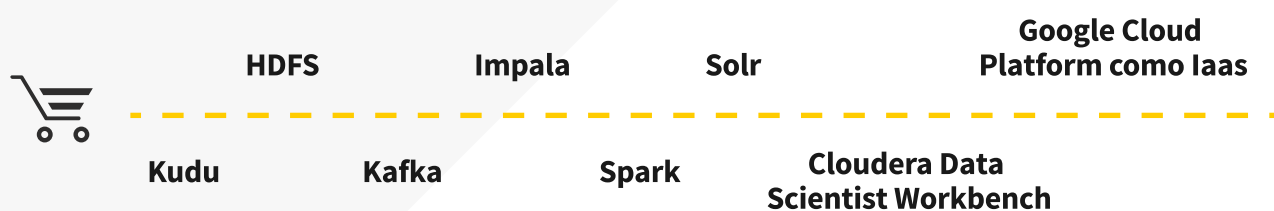
The solution

A Data-Centric model was chosen with the goal of having all data generated by Carrefour reside in a single storage repository. This approach enables decision-making based on data evidence. The more historical data available, the more accurate the historical series will be.

The model also allows for the implementation of multiple use cases with centralized data, improving functionality and providing a complete view of customers through data generated across all sales channels.

Additionally, technical teams do not need to perform separate ingestions for each project, making data exploitation much simpler.

Technologies applied

HDFS	Impala	Solr	Google Cloud Platform como Iaas
Kudu	Kafka	Spark	Cloudera Data Scientist Workbench

Global results

A significant storage and data processing capacity has been achieved across all business areas, allowing for subsequent data exploitation and analytics.

The possibility to apply many different technologies based on parallel and distributed processing ensures security and elasticity. This is due to the feasibility of generating use cases with existing but unexploited data.

Thanks to the Data-Centric model with a Big Data platform, Carrefour can maintain a 100% productive environment: with the stability demanded by the business, 99.99% availability, and 100% SLAs.

PUE services

PUE acts as the extended team managing and implementing extreme monitoring of Cloudera platforms according to Carrefour's policies. Furthermore, PUE provides guidance to technically define needs and promote use cases, thereby enhancing the business through:

- Exploitation, operation, administration, and maintenance of the Cloudera platform:
- Advisory in the design of architecture and engineering to define the migration strategy to Google Cloud Platform.

Any data problem?

Your trusted partner for critical, complex and large-scale data projects

Contact us: sales@pue.es