



# Indium Software delivered an Integrated Big Data Analytics and Data Visualization solution for Global CPG Player

**Optimize data preparation for analytics through Big Data and obtain timely critical insights from Custom Analytics generated on-the-fly**

## **Situation**

The client is an Analytics and Consulting firm, who serves a global player in the Consumer Packaged Goods (CPG) industry. The global CPG player was looking for ways to gain critical insights on-demand for each SKU, to identify trends and make fact-based decisions.

Existing process made key decision makers **wait for 3 days** to view processed data, and required manual intervention from SAS Data Admin. High license cost to upgrade and dependency on SAS Data Admin made flexible and scalable open source Big Data Analytics alternative look attractive.

The client chose Indium Software for its flexible engagement model and on-demand access to a pool of Top Big Data Infrastructure and Analytics talent. Indium Software was commissioned to develop Big Data Analytics solutions to:

- Optimize data preparation and custom analytics generation.
- Gain immediate insights without manual intervention.

## Solution

The algorithms to prepare data and generate custom analytics were provided by the client. In phase 1, Indium Software built an integrated Big Data Analytics solution driven from intuitive User Interface (UI), to enable business users to generate custom analytics without engaging IT.

The solution included the below:

- SAS programs used in data preparation for analytics was reprogrammed in Apache Hadoop MapReduce 12.1, based on the algorithm provided.
- SAS programs used to generate analytics was reprogrammed in Apache Hive 0.12.0, based on algorithm provided.
- Intuitive User Interface to trigger custom analytics generation on-the-fly, was built on JSP 2.2 and run on Apache Tomcat 6.
- Data Visualization of custom analytics generated was programmed in D3.js (Data driven documents). This replaced the MS Excel reports created manually.

## Technologies Used

Cloudera Enterprise, Cloudera Manager, Apache Hadoop 1.2.1, Apache Hive 0.12.0, JSP 2.2, Apache Tomcat 6 and D3.js

## Duration

7 months (ongoing)

## Resources

2 Big Data Lead  
1 D3.js developer  
1 UI developer  
1 Sr. QA Engineer

## Engagement Model

Offshore

## Result

The phase 2 of the project is currently in progress. The major benefits realized by the global CPG player include:

- Data preparation for analytics time came down **from 3 days to 3 hours**.
- Time to generate custom analytics was **reduced by 50%**.
- Intuitive User Interface allows generation of custom analytics by anyone without need of IT. Critical data insights now are only clicks away.
- Major Cost savings as tools used in the project were open source, and the only cost incurred was the infrastructure.

## About Indium Software

Indium Software is a Big Data Technology Consulting and Professional Services company. Indium Software focuses exclusively on Global Enterprises and help them leverage Big Data through Strategic Consulting, Technology Selection, Design & Architecture and Implementation of the solution. With offices in the U.S and India, Indium Software offers Flexible Engagement Models and Comprehensive Solution Approach to help customers leverage Big Data

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