



# CASE STUDY

**BIG DATA PLATFORM  
IMPLEMENTATION IN PAYMENTS  
AND TRANSACTION INTELLIGENCE**

**A**nalyse | **P**redict | **M**onetise

# BIG DATA PLATFORM IMPLEMENTATION IN PAYMENTS AND TRANSACTION INTELLIGENCE

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## Overview

This case study focuses on premise implementation of the technology stack at the client's data center. Primary use of the platform would be for data management, reporting, advanced analytics and additional future Big Data use-cases.

## Client profile

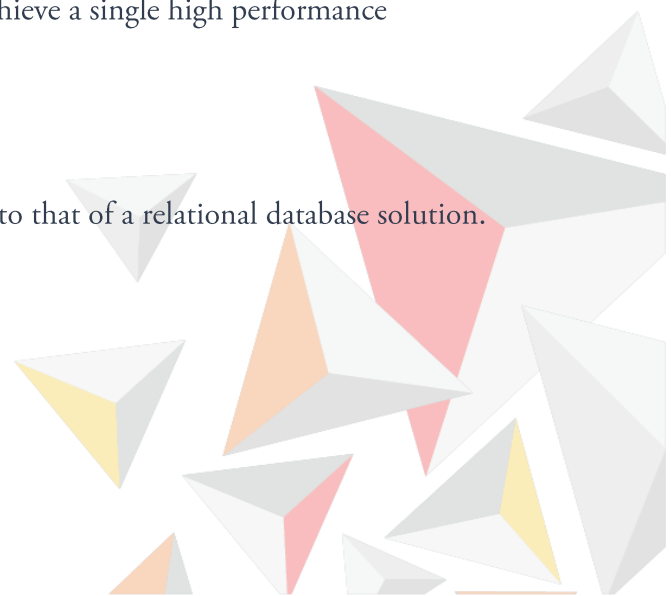
Nodal agency for payments serving 600+ Banks/Payment product providers.

## Pain points

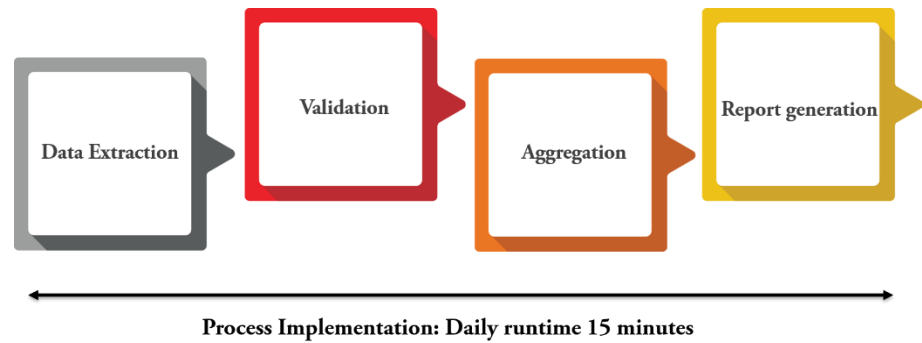
- Large data volumes (Billion+ transactions a month)
- Handling high speed data
- Multiple source systems, each having their own separate databases
- Expanding data archival and reporting environment
- Performance issues with traditional RDBMS based MIS

## Solution Offered

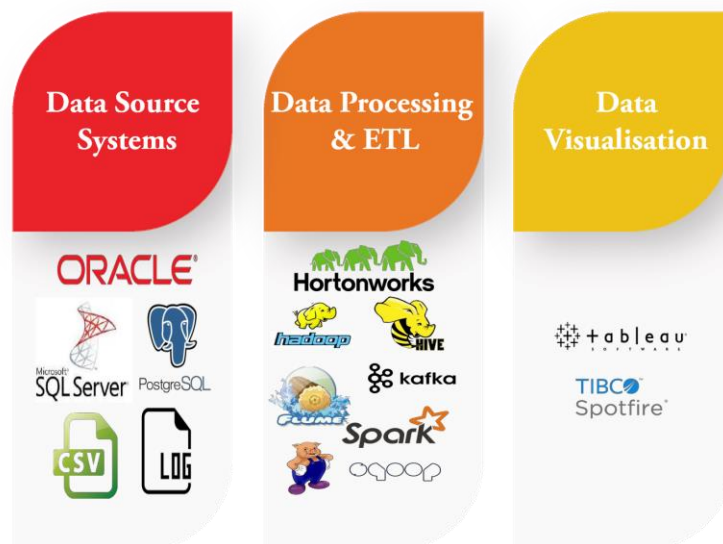
- A big data solution architected on Virtual Machine environment with Hortonworks and Tableau.
- Unstructured text processing for NLP.
- Integration of structured and unstructured data to achieve a single high performance
- Secured archival data storage.
- Automation of Reporting
- Big data solution required only a fraction of the cost to that of a relational database solution.
- Reporting time from hours to few minutes.



- The reporting followed the given process:



### ➤ Hardware/ Software Platform



### ➤ High-performance query execution

- Process large chunk of transaction-level data for specific business insights
- Traditional relational database system would be too resource-intensive due to volume and velocity

Our Big Data solution provided the ability to query and run analytics against high speed data. Additionally, the solution also provided:

- Optimization of complex queries for quick results – Speed up by almost 60-70% in query execution time
- Cluster configured tuning for performance

### ➤ Custom Machine Learning based algorithms

- Design of Cashback system based on specific client requirements
- Point of Sale (POS) activity prediction

### ➤ Platform structure in full play:

- Hadoop services were mapped to multiple use cases. The platform required a set-up time of 6 weeks.
- There was also a Disaster Recovery (DR) setup for the same with replication from Primary setup to DR every 15 minutes.

### **Business value for the client**

- Increased adoption of Big Data technology for range of payment products
- High performance and reliable setup – 100% availability
- Analytical triggers with reduced latency
- Optimal cost of ownership along with high levels of automation
- Availability to handle real-time reporting
- Business continuity in case of natural disasters





## About InnoTx

InnoTx Solutions LLC is Data Science and Analytics Company based in UAE. With a team of 180+ professionals spread across India, MENA, Europe and US, we offer AI driven advanced analytics, Big Data Solutions, Digital Platforms, InsurTech & FinTech Advisory and Consulting and Resource Augmentation. Our list of customers includes Banks, Financial Institution, Insurance companies, Power and Utility companies, Education service providers and Retail chains.

### FOR FURTHER DETAILS:



**+971 50 6160 889**



**[contact@innotx.com](mailto:contact@innotx.com)**



**[www.innotx.com](http://www.innotx.com)**