Embedded analytics for mobility wallet solution

Mahindra Comviva is a value-added services provider for mobile operators Comviva has customers in over 90 countries, predominantly in Asia, the Middle East, LATAM and Africa and offers messaging, mobile commerce, prepaid and business support solution.

Project Name	**Wallet Analytics**
Client Name	**Mahindra Comviva**
Duration & Team	Live since 2015 6 months and 9 people • 1 Project Manager • 1 Lead Architect • 1 Lead Data Analyst • 1 Data Scientist • 3 Lead ETL Developers • 1 UI/UX specialist • 1 Quality Manager
Data Volume	70 million rows per customer per day at an average process upto 3 million records every 15 minutes
Infrastructure	Hosted on Azure Cloud with Linux Operating systems. • RDBMS Source Systems Oracle • Enterprise DB for data warehouse • Pentaho Enterprise Edition 5.4 for data ingestion and visualization service to enable analytics for more than 500 agencies • Scheduled ETL jobs to run every 15 minutes once

Business Problem

- Existing Reports had huge performance issues due to volume of records
- High hit rate in transaction systems coupled with reporting lead to performance bottlenecks
- ETL of Data from source to data warehouse was taking more time
- Not able to share agency specify data on the fly with access controls
- No support for web services
- Existing analytical solutions were slow
- Inability to white label and embed context sensitive analytics

Solution

- Pentaho platform to consolidate data from source into data warehouse close to 3 million records every 15 minutes applying necessary algorithms for deriving insights
- White labelled analytics solution which is infused as part of existing source application.
- Processed huge volume of data and live share of processed data via web services for utilization reduction of source systems
- History data archived and offloaded into hadoop big data storage for future processing
- 1000 pages transactional reporting built using CDE for reduced latency
- Highly partitioned Enterprise DB setup with carte cluster for ETL to meet high performance expectation
- Connected to native mobile app with privileges based access control using dynamic schema processing