

The Astra Telesoft logo consists of the text "Astra Telesoft" in a white, bold, sans-serif font, with a small "TM" trademark symbol to the upper right of "Telesoft". The text is centered within a dark blue, horizontally-oriented oval shape. In the top right corner of the slide, there is a solid red vertical rectangle.

**Astra Telesoft™**

# Astra Telesoft

CASE STUDIES

# Enterprise Data Platform

## Background

No unified data platform causing

Unable to get insight of data

Point to Point data pipeline lead to data duplication

Legacy Technology causing operational overhead

Lack of data governance

## Solution

Cloud based solution with unified ingestion layer.

Support for streaming & batch use cases.

Polyglot data storage with data lake.

DG including Data catalog

Technology : AWS Glue, lambda, SNS, SQS, RDS,KDA, S3, Snowflake, Datahub

## Outcome

Low maintenance overhead

Unified ingestion mechanism which reduces data sources onboarding time

Centralized data warehouse with consumer interfaces which reduces consumer onboarding time

Centralized data catalog

# BSS Fraud Losses

## Background

BSS system need to find unusual pattern inside data coming from different system/event. Due different system data look like orphan until merge over single platform.

## Solution

Move downstream data from different-2 system over single unified platform.

ML Model find unusual pattern inside to predict anomaly inside BSS system.

Based on incident system have workflow for corrective measure.

Technology : Cloudera, Hive ,Sqoop, Pig ,Apache Spark and Tableau

## Outcome

BSS vendor have near real time dashboard with all anomaly inside system.

Complete inside of corrective measure take by system over detected anomaly.

# Self Organizing Networks

## Background

Telecom engineer need under stands low performing cells. Based on information come from performance manage system or health data coming from cells.

## Solution

ML based model identify low performing cell inside customer network topology and route network toward nearest available health cells.

Technology :  
Cloudera, Apache Kafka, Apache Spark, Apache Hive, and neo4j.

## Outcome

Provide real time update for faulty cell inside current topology. Which help operator execute predictive maintenance.

# Microservices Platform

## Background

One of leading banking solution provider who issues and manage prepaid cards wanted to develop Unified centralized core microservices platform which can be integrated with various domain services & third-party services

## Solution

Design & Developed unified microservices platform with core platform service

Tech : Spring Boot, Keycloak, Kong Gateway, AWS EKS, docker , ECR, Lamda, MongoDB , RDS, ELK,

## Outcome

Development of new services is faster & go to market time is very less.

Easy integration with third-party services

Centralized core services such user management , iam, configuration , subscriptions make easy & reusable

# Machine Learning Based Billing Anomaly Detection

## Background

Telecom operator having lot of issues in billing system causing big revenue loss as well as customer churn due to dis-satisfaction

## Solution

Machine Learning based , Big data & Analytical solution to predict billing issue before generation of bills.

Technology : AWS EMR (Hadoop, Hive , Java , Spark SQL, Spark ML) Sagemaker, Elasticsearch and Power BI.

## Outcome

Helped operator to save million dollar revenue

Helped to reduce customer complaint & customer churn