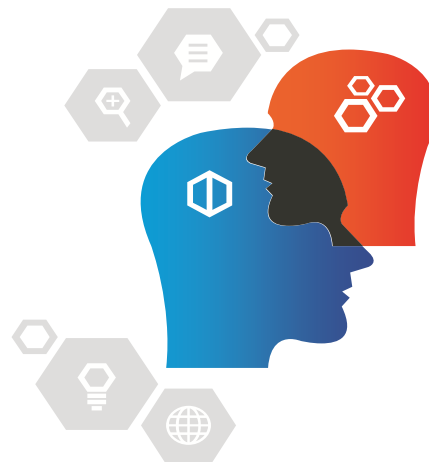# Gamma Analytics

Metering and Billing Audit

Telecom regulators play a key role in protecting the interest of consumers; a potential major issue that put consumers at risk is the overcharges by telecom operators. Telecom Regulator therefore makes it mandatory for operators to appoint auditors to examine metering and billing systems so that the consumers are not overcharged

Telecom network has a collection of nodes and links that are connected to enable telecommunication between terminals. The nodes use switching to send signals through the links to reach the correct destination. Call (event) details are captured by the switching centers and become the information source for metering and billing. Auditors therefore have to ensure – for both postpaid and prepaid -- the call (event) details in the metering and billing system accurately match the information generated at source i.e., switching center

Gamma Analytics' provides solutions for auditors to access process and manage telecom data. Gamma ETL module can collect any industry standard file from any source, de-serialize (parse), enrich and load to database or upload to CSV/Excel on the fly. CDRs, Mediation files, pre rated and rated billing files etc., in binary or ASCII formats can be handled natively. Comparing between different data files such as Switch and Billing are performed by the analytical engine. Reports are shown in the dashboard with drill down capability.

FEATURES

- Pre-built collectors,parsers and transformers for telecom data
- Collection and processing in event based or batch mode
- Duplicate check on files level as well as record level
- Real-time reconciliation, summarization and reporting
- Dashboard with drilldown capability

TYPE OF FEED SOURCE

- H LR, MSC, Mediation
- TAP, GSN, SGSN, CGW, IN, SMSC,
- Billing System, CRM, Provisioning, DW
- AWS, Google
- SFTP/SMTP/SNMP

AUDIT REPORTS

- File sequence check
- Duplicate check
- Logs, Audit trail
- Mediation Rules check
- MSC(Mobile Switching Center) Vs. IN (Prepaid Charging System)

BENEFITS

- Designed for telecom
- Implementation within days
- Real-time report generation with evidences on the observation and non-conformance
- Telecom consulting services model available
- Hosted on premise or on cloud
- Dashboard

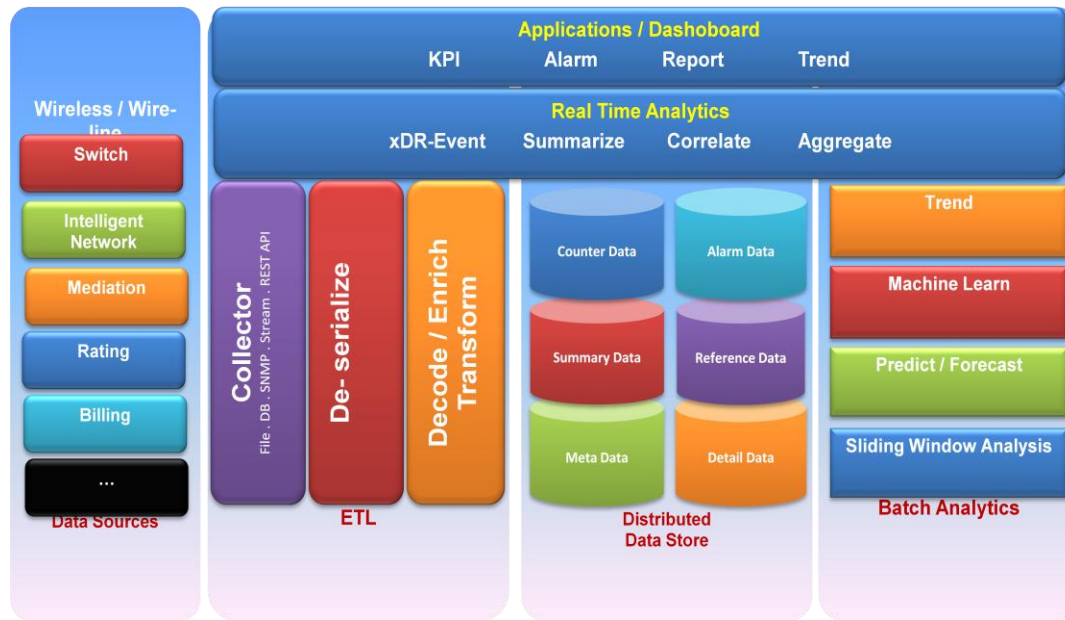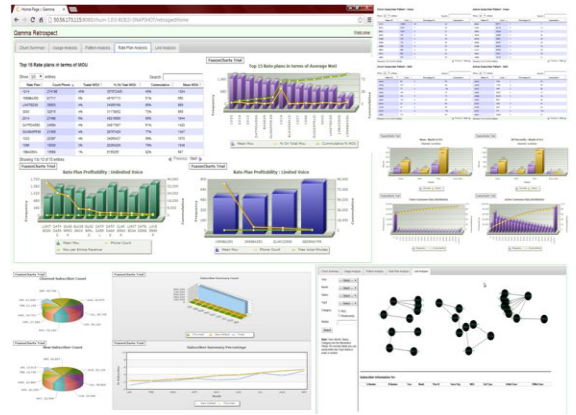| DOMAIN SPECIFIC	DATA AUDIT	DATA ANALYSIS	DATA SCIENCE	ANALYSES AS SERVICE

GAMMA

About – Gamma Analytics

THE FIRST BIG DATA ANALYTICAL PROVIDER THAT INCLUDES DOMAIN INTELLIGENCE TO ENABLE, STREAMLINE AND MANAGE TELECOM DATA PROCESSING, DATA SCIENCE AND ANALYSIS

- Light weight modular solution designed and optimized for Telecom
- Solution includes pre-defined analytics for telecom data
- System set up and go-live in days
- Optional Product as a service model to eliminate HW / SW expenses and minimize HR
- Currently deployed in the Americas and processing terabytes of data daily
- Advanced technology to support real time analyses
- Advanced visualization and dashboard that can also be viewed from Android and iOS
- First and only telecom solution to fully incorporate Data Science Services

OFFERINGS

- ETL Connector
- De-serializer
- Enrichment Plugin
- Loader
- Data Warehouse Builder
- Data Analyzer
- Dashboard
- Predesigned reports for IT operations
- Standard reports for telecom audit
- Churn Management
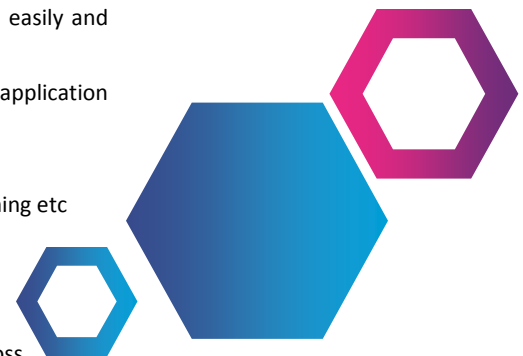- Mobile Money

WHY GAMMA ANALYTICS

Typically telecom audit requires ability to easily access operator's data and perform independent parsing and enrichment, these require systems that can easily be deployed or accessed with functionality to provide standard reconciliation automatically. Gamma solutions can be deployed or accessed easily and users can generate results immediately.

Uniquely Gamma Analytics bundles Data Science services as a component which means the application includes Data Science elements as well as Data Scientist consulting as part of the solution set

This becomes an important differentiator as a standard analytical set includes

- Reading and analyzing data from different sources – MSC, IN, Mediation, Billing, Roaming etc
- Reconciling between different files
- Enriching data
- Source data for reconciliation

Full branding and localization support processes to reduce costly errors and potential revenue loss.

ADVANCED TECHNOLOGY SUPPORT   **ANALYTICS**   **DATA SCIENCE AS A SERVICE**

GAMMA   /   TELECOM BIG DATA ANALYTICS